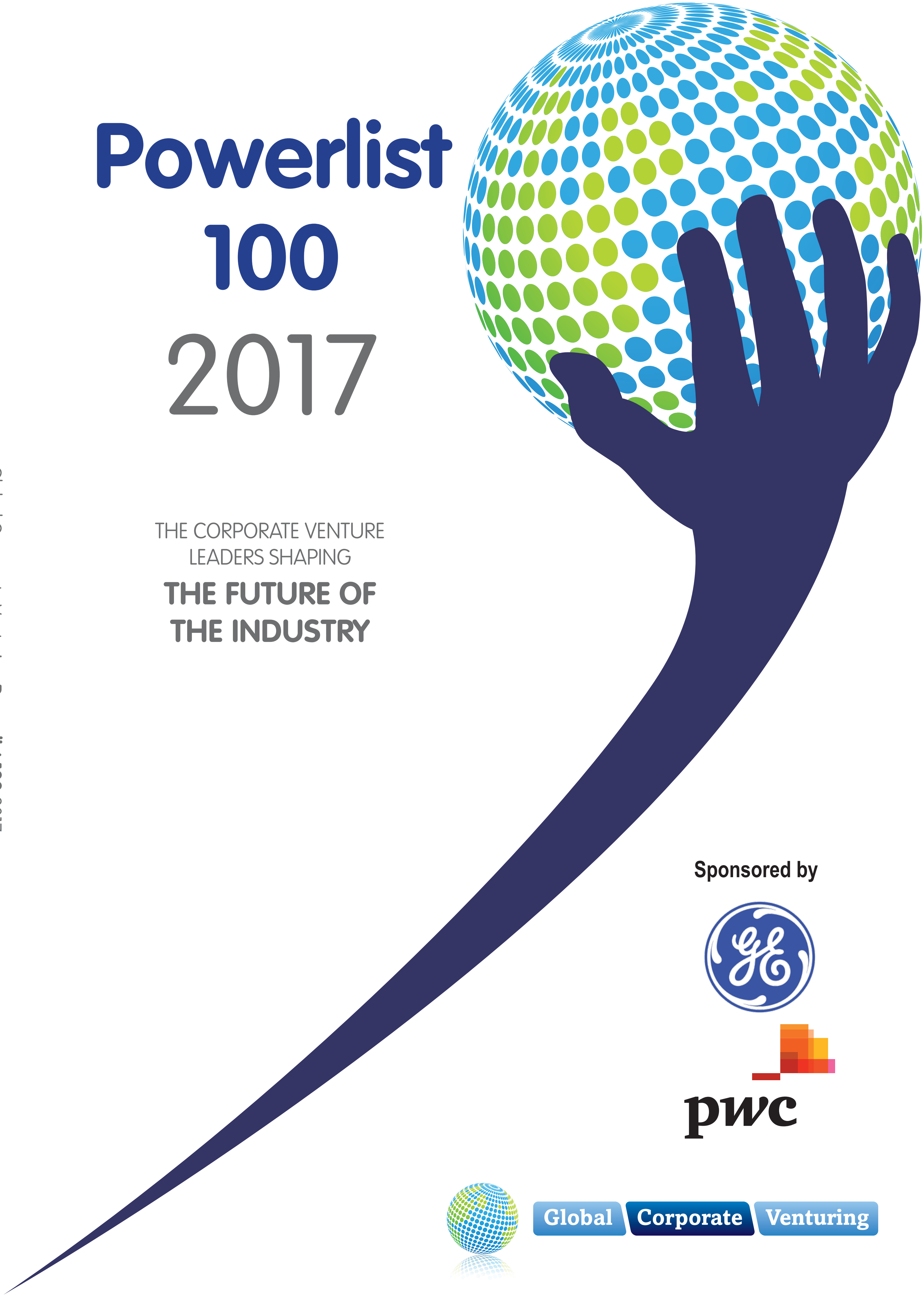
Powerlist 100 2017



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THE FUTURE OF THE INDUSTRY

Global Corporate Venturing **Powerlist 100** 2017

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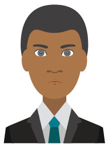
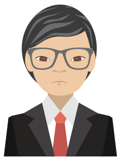


Arnaud's CEO asked him how many deals their closest five competitors had done that year. Minutes later he pinged her the answer – and all the detail plus some cool looking charts.

Marie urgently needed to create a graph showing the number of CVC investments, and their dollar value, in healthcare in Asia over the past two years. Three minutes later the graph was in her presentation.

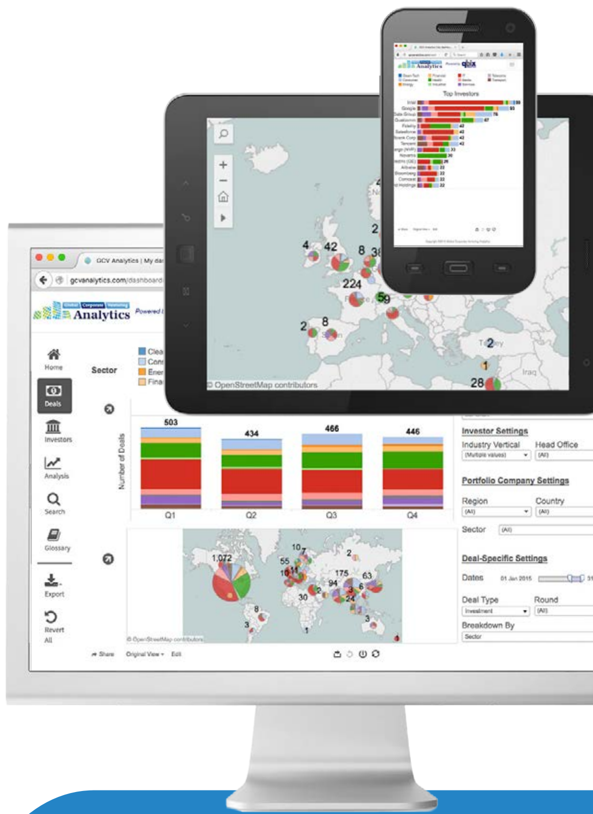


Zhang is a consultant and had a meeting scheduled with a CVC. Needing to do a quick bit of background research he popped into GCV Analytics. He walked into the meeting knowing what deals they had done and who they had co-invested with and was also able to tell them what the competition had been doing.

Anika works for a government and needed to benchmark inward venture investment from corporates, compared to other similar countries. She used the information to get an increased marketing budget.

Global Corporate Venturing

Analytics



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Curiosity among venturing leaders drives the industry

By James Mawson, editor-in-chief

What links South Africa-based media and e-commerce company Naspers, China's largest company by market capitalisation, Tencent, car-hailing company Didi Chuxing, and local bike-sharing platform Ofo and Brazil-based peer 99?

Naspers acquired about a third of Tencent more than 15 years ago for about $30m and has seen the latter's value climb to about $300bn. Tencent, in turn, understood the power of the venture model and invested in what is now called Didi Chuxing, which has backed Ofo and 99.

The same question could be asked of SoftBank, Alibaba and Didi Chuxing. And the answer would be the same – SoftBank in 2000 invested $20m for a 36.7% stake in Alibaba, which has invested in Didi Chuxing and so on to Ofo and 99.

That Naspers, SoftBank, Tencent, Alibaba and Didi are all in the top 20 for Global Corporate Venturing's Powerlist 2017 indicates the power of the venture model of financial and often strategic and operational support. It also reflects the rise of non-US-based corporations, especially in China, which overtook the US last year by the value of its corporate venturing deals.

Portfolio companies are turning to venturing themselves – either from their balance sheet or using funds raised – indicating how rapidly wealth has been created by startups and so-called proxy wars by technology groups using investee companies as part of bigger battles against each other. Didi Chuxing last month raised $5.5bn – the largest private round in the world for any company at any time – to take its total funding to more than $15bn.

But the speed of this venture (r)evolution this decade has caught many unprepared and underinvested.

I put the above question last month to a group of 100 CEOs, who represented about the third of Canada's gross domestic product, and the answers, while perceptive, missed the corporate venturing connection.

Mary Barra, General Motors chairman and CEO: "Under Jon Lauckner's leadership and vision, the GM Ventures team operates with an entrepreneurial spirit, common purpose and clear direction to focus on technologies that matter most for our customers."

Bruce Broussard, Humana CEO: "It is critical that we seek out, attract, partner and invest in the most innovative startups in healthcare."

Ken Chenault, Amex chairman and CEO: "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."

Iain Conn, Centrica group chief executive: "The launch of Centrica Innovations is an important step in identifying and responding to the changing needs of our customers."

Herman Gref, Sberbank CEO: "Efficient engagement in the startup ecosystem through VC activities is in large part accountable for our success."

Stefan Oschmann, Merck CEO: "We consider Merck Ventures a key tool to access external innovation."

Thomas Rabe, Bertelsmann CEO: "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."

Ginni Rometty, IBM CEO: "IBM Ventures is essential to how we engage entrepreneurs and developers who are building innovative applications and technologies for cognitive solutions and cloud platforms."

Scott Serota, Blue Cross Blue Shield Association president and CEO: "BlueCross BlueShield Venture Partners have played a key role in advancing healthcare innovation, establishing Blue Cross Blue Shield as a highly desirable partner for leading venture firms and entrepreneurs."

These Canadian CEOs had almost no comprehension of venturing or how innovation could affect their businesses. That SoftBank could be raising $100bn for its Vision Fund, or that Intel Capital put out more than $400m in the first three months of this year or even that Tencent probably committed this last month alone, was eye-opening for them.

For context, the entire venture market amounted to about $134bn last year, according to data provider Preqin, with GCV Analytics tracking corporations involved in $83bn of these deals. It was $31.3bn in 2005, with the US, Canada, Europe and Israel 93% of the total, according to Dow Jones, and corporate venture capital an unreported proportion..

The good news is these Canadian CEOs are ready to engage and learn, encouraged by a forward-looking government and select leaders, such as those at Magna, Rogers and Telus, whose corporate venturing leaders make up three of the Powerlist 100.

Other countries, such as Brazil, have engaged their business community earlier and seen a rapid increase in senior executive activity and leadership. When GCV partnered government agency Apex-Brasil for its first Corporate Venture in Brazil event in October 2015, almost none of the senior executives among the country's 50 biggest corporations had any innovation strategy. For last October's second conference, more than 100 attended and had developed strategies, and two of its leaders, from Embraer and Stefanini, are in the Powerlist 100.

While China overtook the US for corporate venturing activity last year, according to GCV Analytics, the rest of the world is trying to catch up. But the rewards reaped by those who have scaled up have been so enormous – the top five listed companies in the US by market capitalisation are now tech firms, and the same leadership by tech firms is true in other stock markets.

Fundamental changes in quantum computing, artificial intelligence (AI), healthcare and energy production and storage offer further great opportunities.

As Demis Hassabis, co-founder of AI startup DeepMind, acquired by Alphabet rather than remain independent or be listed, told news provider Financial Times last month: "Intelligence is probably a process of converting unstructured information into useful and actionable knowledge."

This information can come in many forms, and groups, whether asset manager Blackrock with its Aladdin technology platform, hedge fund Bridgewater Associates or media group Thomson Reuters, plan to turn a variety of data and information into actionable intelligence to predict likely mergers and acquisitions and share price movements based on current innovation trends.

But while hope remains that early engagement and investment in startups can be transformative, in the ways Naspers' investment in Tencent or SoftBank's in Alibaba have been, doing so effectively is less easy.

GCV Analytics tracked 965 corporate investors active in at least one

Solmaz Altin, Allianz Group chief digital officer: "Actively engaging with startups via investments and partnerships plays a critical role in Allianz innovation and digitisation efforts. The importance of leveraging leading-edge technologies, business models and partnering startups is crucial for the transformation of the insurance industry."

José Antonio Filippo, Embraer chief financial officer: "Since it was created in 2014, FIP Aerospace has been supporting small and medium-sized innovative companies throughout Brazil, having already achieved important results. The corporate venture capital approach allows investment in new opportunities, with risk-sharing and resource leverage. Such investments are executed faster and at a lower cost, ensuring that Embraer executives remain focused on current businesses."

Henry Gosebruch, AbbVie chief strategy officer: "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."

deal last year but 1,667 over the five-year period to the end of 2016. The difference between the two numbers indicates how few corporations have dedicated time and resources to make it a meaning part of their innovation strategy.

The top 20% of these corporations, primarily the members of the GCV Leadership Society, are responsible for about 80% of deal activity.

The top criteria often separating the leaders from the also-rans is CEO support *(see the C-suite quotes)* and finding the talented people who can drive a corporate venturing team. The examples in the Powerlist 100 show what the combination of both elements can bring. Finding talented leaders is the first and hardest priority, so executives such as Laurel Buckner, who last month left General Communication, Alaska's largest telecoms company, after its $1.1bn acquisition by Liberty Ventures Group, a subsidiary of US-based media conglomerate Liberty Interactive, will be eagerly snapped up.

Alongside M&A, there was some churn in the Powerlist with the retirement of Deborah Hopkins from Citi, Graeme Martin from Takeda and Rachel Lam from Time Warner, moves into consultancy for Julia Rebholz and Dirk Nactigal from Centrica and BASF, respectively, departures for Bill Maris, Jim Lussier, Soichi Tajima, Geeta Vemuri, Katelyn Donnelly, Girish Nadkarni and Nikesh Arora, and move by Susana Quintana-Plaza from Eon to Siemens in a supporting role to Lak Ananth, himself moved from Hewlett-Packard Enterprise. Women were slightly overrepresented on this list of changes compared with the one-fifth (23) they contsituted in this year's Powerlist.

The Powerlist, and the near-2,000 corporations in the initial GCV analysis, indicate a number of skills they have in common. They are often the same talents the CEOs of parent companies have, as identified by Harvard Business Review:

- They are decisive even with imperfect information – what Amazon CEO Jeff Bezos calls deciding at the 70% level of available facts.
- They engage stakeholders around value creation and performance.
- They adapt, reversing wrong decisions as facts change.
- They deliver reliably.

Few of the 140-plus CVC units with at least a 10-year track record have the same strategy and team as when they launched. Of the 100 named groups in the Powerlist, fewer than 20 have been heads for at least a decade – the median year for becoming one was 2013. The average year was 2011 given outliers, such as Barbara Dalton at Pfizer.

Delivering for corporate venturers often means making both a financial return as well as having strategic relevance. There is little point being the tip of the innovation spear if the targets are side issues for what might affect the company in the medium to longer term. But given the short attention spans of corporations – the relatively high turnover of senior executives – and impending economic downturn, making sure a CVC unit can deliver at least financial results in the short term of a three-year horizon is important.

However, aiming for financial returns can miss the bigger picture. The CEO of one Canada-based company described how he had set up a series of accelerators across the country but was struggling for metrics to judge their performance.

Ulrich Küsthardt, Evonik chief innovation officer: "Venture capital has become a key pillar in our innovation strategy. It supplements Evonik's approach to open innovation through partnering innovative startup companies."

Rather than aiming for the usual key performance indicators of level of follow-on funding, aggregate revenues and employee numbers, a bigger question could be in finding a mission that could engage all.

As Apple co-founder Steve Jobs said: "My passion has been to build an enduring company where people were motivated to make great products. The products, not the profits, were the motivation. [John] Sculley flipped these priorities [when he replaced Jobs] to where the goal was to make money. It is a subtle difference, but it ends up meaning everything."

By focusing narrowly on the economy and financial performance, the unintended consequence has been slowing growth rates and, over the past 15 years in the US, greater revenues to the top four corporations in the majority of industries and declining startup rates.

John Pietrowicz, CME chief financial officer: "Market participants around the world rely on CME Group for managing their risk across every major asset class, so it is critical for CME Group to stay ahead of technology innovation. CME Ventures ensures we invest strategically with partners who are pioneering technologies in spaces that could affect financial markets in the future including artificial intelligence, digitisation and cybersecurity, among others."

Allworth overlaid another economist, David Moss, whose book on US democracy gave him the impression it was the shift among policymakers after the Second World War to focus on the economy rather than the impact on democracy that was having an effect.

If profit moves from "necessary but not sufficient" to "prime objective" then potentially disruptive or important events can be missed.

In this light, the decision by Wendell Brooks, president of Intel Capital, to make all managers responsible for diversity is an important signal. Similarly, Centrica's decision to incorporate the impact venturing approach taken by its Ignite fund for its new £100m ($130m) program is heartening.

A decade ago, corporate venturing was a byword for "dumb money" and fickle investors. The band of long-serving and hard-working visionary corporate leaders and the newer breed prepared to reimagine venture from a cottage industry to primary component in financial markets is a sign of the shift that has happened in the relative blink of an eye.

Darren Entwistle, Telus CEO: "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."

Two of the top three corporate venturers in this year's Powerlist are former investment bankers, and all CVCs are involved in deals globally on a scale never seen or imagined before. To get an idea of the leadership qualities of the future, see our article on a Silicon Valley roundtable of corporations, mixed by sector, experience and gender, held under Chatham House rules, and the report on a Bell Mason Group survey of CVCs to get ahead of the emerging data trends.

As physicist Albert Einstein said: "The important thing is not to stop questioning. Curiosity has its own reason for existing."

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.

Bell Mason corporate venturing insights survey

Corporate venturing executives say the threats to their units have increased as their programs have grown.

Heidi Mason and Liz Arrington of consultancy Bell Mason Group (BMG) interviewed about 30 corporations that have invested in at least one venturing deal over the five years from 2012 to 2016 and concluded: "Parent company cultural, organisational and operational antibodies tend to become more pronounced as CVC programs grow and scale, and visibility increases both inside and outside the corporation."

BMG in its CVC insights project summary said challenges included the "high degree of internal time sink for CVC leaders and teams in corporate executive staff and business unit relationship management – between 60% and 75% of new unit leaders' time – and ongoing CVC education", difficulty in "recruiting and retaining a quality professional team while maintaining alignment within the parent's culture" and "making end-to-end portfolio company, parent company and business partnering work effectively".

These more pronounced risks come on top of traditional concerns that corporate tolerance of CVC program risk and their "exceptional" processes and governance structures start to wear out from the third year, according to BMG. As a result, there was greater insistence on the need to see early wins as indicators of program performance.

But the BMG survey of executives. arranged by maturity of their units – one to two years, three to five years, and six to nine-plus years – found pressure on corporations to set up and run a CVC unit professionally meant both an increase in the number of these venturing programs and better reception and understanding by other "stakeholders in the innovation investment ecosystem".

Corporates across industry sectors are finally broadly acknowledging CVC as a mainstream corporate innovation tool

Global Corporate Venturing, a data and research partner for the project, identified 1,667 corporations that had invested in at least one startup between 2012 and 2016, with 965 active last year, up from 472 at the start of this five-year period.

BMG said in its summary: "Corporates across industry sectors are finally broadly acknowledging CVC as a mainstream corporate innovation tool. Corporate boards and leadership are feeling intense pressure to respond to new market realities – the speed of changing landscapes, digital and emerging technology ubiquity, increasing competitive urgencies."

This meant CVC professionalisation had been taken to a "new level" and "focused on end-to-end investing for accelerated and integrated – strategic plus financial – performance delivery," BMG executives Mason and Arrington said in their summary.

They added: "Program charters and CVC investing platforms – team, structure, processes, partnerships – have been honed to deliver strategic innovation leverage, market-maker opportunities and accelerated proof points for commercial traction."

For new programs, with one to two years' experience, BMG said the bar was being raised on their quality. This was reflected in benchmarking of the units and their compensation against peers, greater "clarity in strategic intent and program chartering with appropriate fusion of financial and strategic goals", use of "end-to-end investing tools", such as CVC, business development, and mergers and acquisitions, hiring experienced CVC executives, leaner decision-making and end-to-end investing processes, and better business partnering skills among parent corporation, syndicate partners and startups.

Primary investing objectives included intelligence on position with future trends and technologies and identification of new business models and desirable adjacent market access, BMG said. Corporations were then using these insights through the development of a market-maker toolkit by combining CVC with business development and partnering, and M&A, and speeding up activity through senior-level support often via commercial rather than research business leaders.

BMG identified a more "common use of legal entities, such as limited liability companies, to simplify internal corporate financial reporting, reducing operating friction of on-balance-sheet reporting, as well as providing a downstream vehicle for potential CVC program expansion and team retention".

It said the typical viable first fund commitment was $100m-$150m with a multi-year time horizon for investing at least five deals a year, and so CVCs were pairing "trusted insiders – senior people fluent in parent language, culture, business and strategy with trusted internal networks – and specialist outsiders – senior investment professionals with experience building CVC programs or VC, private equity or startup company experience".

Visit *www.bellmasongroup.com* for a complimentary copy of the report. All GCV summit and symposium attendees can receive a full version with special access to members of the GCV Leadership Society.

BMG also noted the emerging use of "leverage funds", which are assigned budgets to facilitate startup-to-parent company collaborations, such as trials and pilots, and to incentivise so-called catchers of opportunities at the corporation.

These moves to improve scale and effectiveness of corporate venturing were designed to help units get through the three to five-year pivot point in order survive potential management changes and corporation strategy shifts that can occur around these times, BMG said.

Mason and Arrington in their summary said high performers showed "fast wins with clear impact for all stakeholders, as early proof points of capabilities and risk reduction".

This often required changing the CVC charter to "preserve strategic alignment with parent and stakeholders and to enable efficient replication or customisation for geographical or new domain expansion". It also meant looking for faster and bigger bets for greater impact in a smaller number of areas through the use of M&A or growth private equity strategies and partnering complementary CVCs as well as collaboration between portfolio companies and the parent corporation.

BMG said good CVC teams focused as much on retention of high-performance professionals as on their recruitment, given they were "now vulnerable to attrition, given a competitive external environment and an increase in poaching".

If retained, these experienced CVC teams can then better provide an expert view of emerging market structures around new technologies, products, platforms, services and apps and how corporations can maximise their position.

If orphaned through strategic or personnel changes, however, the CVC unit becomes a candidate for spinning out. Recent spinouts include Sapphire Ventures from Germany-based software provider SAP, BMW i Ventures from the car maker, Spain-based bank BBVA's Propel, Deutsche Telekom Capital Partners, and Echo Health Ventures from Cambia/Mosaic.

1

Rajeev Misra SOFTBANK CAPITAL

There is a saying that you can tell the type of audience at a conference by the temperature in the room – if it is relatively cold it is an event for investors wearing jackets, and if it is warmer then it is for entrepreneurs and developers wearing T-shirts.

The official photo of India-born Rajeev Misra, CEO of Japan-based conglomerate SoftBank's planned $100bn technology fund, shows an interesting mix of the well-heeled Mayfair, London-working financier in a blue cotton shirt without a tie, mechanical watch (probably Rolex judging by the logo on the strap), Mont Blanc cufflinks, religious red string ribbon for protection, and beads, or mala in sanskrit.

The Gordon Gecko-styled slicked-back hair indicates a financier who emerged in the 1980s with a well-developed sense of the power of money to influence business and society. If his sense is right he has arrived at the right place, as 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".

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, 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. The fund's 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.

In this respect SoftBank may be considered more of a Google, Tencent, Alibaba or Baidu rather than a private equity-style conglomerate, such as Blackstone Group or Berkshire Hathaway.

As Global Corporate Venturing news editor Robert Lavine noted in a newsletter, by buying Fortress, SoftBank gains a stake in Lyft, the ride-hailing platform valued at $5.5bn as of late 2015, a few months after Fortress contributed to its series E round.

SoftBank already holds a portion of ride-hailing peers Ola, Grab and Didi Chuxing, and the Lyft stake means SoftBank is backing all Uber's main competitors worldwide. That is a classic venture-based approach to a large new market under development.

SoftBank has explored the changing transportation market through its existing businesses. Most recently, in September last year, after it completed its acquisition of ARM, the chip designer announced that its new processor design would be used in autonomous cars, a market that most ride-sharing services want to understand or utilise.

Before that, in July, SoftBank partnered carmaker Honda to bring artificial intelligence to connected cars. SoftBank has already built a humanoid robot called Pepper, which can converse with people and recognise their moods, while Honda has its own mobile robot, Asimo.

And prior to that, in January last year, Sprint customers learned of Ride-Fi, a technology launched by mobile phone manufacturer Alcatel Onetouch, which enables users to transform their cars into mobile hotspots and connect up to eight devices to 4G long-term evolution wifi.

Subsequently, in December, SoftBank agreed to invest $1bn in satellite operator OneWeb as part of a $1.2bn round, before then engineering the latter's merger with one of its founding investors, Nasdaq-listed Luxembourg-based peer Intelsat, in an all-stock deal worth about $13bn of equity and debt.

SoftBank is investing $1.7bn to acquire a 39.9% stake in the combined company, paying about $5 a share for common stock. Wifi by satellite avoids the need for cable and is suitable for large geographies and car travel.

As these examples illustrate, given the range and reach of its businesses, SoftBank is in a unique position to see all the major industries that are being disrupted. And SoftBank has the funds to merge or pull assets into different areas to capitalise fully on technological change.

Add the payments, blockchain and media content being developed by SoftBank-affiliated portfolio assets to the hypothetical car-centred computing platform it is building, and the scope of the company's potential becomes almost beyond comprehension – and, what is more, here we are considering SoftBank's competitive advantage in just one technology area.

If you look regionally, such as India, a similar pattern has been forming. SoftBank is to lead a $250m funding round for India-based short-term accommodation provider Oyo Rooms, the Economic Times reported last month, citing sources. It will supply $225m of the funding through the $100bn Vision Fund.

The size of the round is half the $500m figure cited by reports in February this year, but it will increase SoftBank's stake in the company from 27% to 42%. The reduction was reportedly due to existing backers objecting to the dilution of their stakes in a round that would have given SoftBank a majority share of Oyo. SoftBank led a $100m round for Oyo in August 2015 and invested $62m a year later at a reported $460m valuation.

SoftBank's other Indian deals could be a merger of e-commerce marketplace and portfolio company Snapdeal and its biggest domestic competitor, Flipkart. SoftBank holds a 35% share of Snapdeal and two board seats, and is attempting to broker the deal, after which it intends to provide roughly $1bn for the merged company.

SoftBank could also invest between $1.2bn and $1.5bn in One97 Communications, the e-commerce firm that also owns mobile financial services and payment platform Paytm, in return for a 20% stake. It reportedly invested $250m in on-demand ride platform Ola in February this year as part of a $330m round that boosted its stake to 22.5%.

The strategy would give SoftBank sizeable stakes in the market leaders in India for consumer goods, ride-hailing and financial services as well as accommodation booking, and would also hypothetically give the companies a common link to each other. As Lavine noted, it would require only a unifying platform – a messaging, social media, e-commerce or search engine app, if not an operating system – to unify those through a common entry point.

It would effectively replace the position SoftBank holds in China with its significant minority stake in Alibaba. In June last year, SoftBank said it would sell at least $7.9bn of shares in Alibaba in the first sale of shares in the Chinese e-commerce giant by its largest shareholder.

SoftBank began backing Alibaba in 2000, when its initial investment was $20m for a 36.7% stake, and the share sale reduced its holding to about 28% from 32.2%, diluted by Alibaba's initial public offering.

The two companies said they would maintain a strategic partnership, with Son remaining a director.

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.

The Vision Fund will have $25bn from SoftBank and $45bn from Saudi Arabian sovereign wealth vehicle Public Investment Fund, with sizeable commitments from other governments in the Middle East, such as Abu Dhabi's Mubadala Development Company and Qatar Investment Authority, as well as corporate limited partners, including reportedly $1bn each from Qualcomm, Apple and Foxconn, and money from the family office of Larry Ellison, co-founder of computing technology provider Oracle.

In March, Foxconn, a Taiwan-based electronics contract manufacturer, paid $600m for a 54.5% stake in investment fund SoftBank Asia Capital.

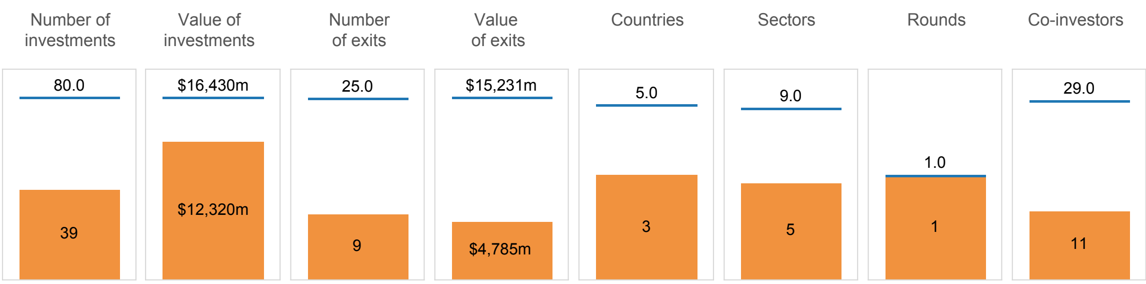
Misra, who is also an independent director on the board of Eros International, the holding company of Indian movie production and distribution company Eros International Media, has a master's in computer science from the University of Pennsylvania and an MBA from Massachusetts Institute of Technology's 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."

SoftBank's investment activity since the beginning of 2016



2

Zhaohui (Jeffrey) Li TENCENT INVESTMENT

In 2011, when Tencent set up a RMB10bn (then $1.5bn) corporate venturing program, one insider said: "Overseas, Tencent is being cautious partly as the China market is so big and also because so few Chinese companies have been successful overseas. So they are developing gradually, certainly compared with US firms' way of doing business, which is to go into a market and tell how it should be done."

Six years later and Zhaohui (Jeffrey) Li, Tencent Investment's managing partner and a co-head of mergers and acquisitions – with Forest Lin since September 2015 – has exceeded expectations and invested more than $10bn in at least 300 companies. That excludes closing the acquisition of a majority stake in Finland-based gaming company Supercell for $8.6bn in October last year from Japan-based conglomerate SoftBank. The Supercell acquisition was complicated by Tencent syndicating 50% of the equity to others and a $3.5bn loan, requiring an enormous amount of negotiating, Li admitted.

Best-known for its flagship social products, WeChat and QQ, Tencent since September has been China's largest listed company with a total market cap of nearly $300bn. The company 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."

By the end of 2015, the total fair value of Tencent's investment in just listed portfolio companies reached $15bn, the company said.

With a phenomenal estimated 100 deals in both of the past two years, Tencent more than matches traditional corporate venturing industry behemoth Intel Capital by number of deals while putting billions more dollars to work – $5.5bn in 2015 alone. Li told attendees at the Global Corporate Venturing & Innovation Summit in January he expected to make another 100 investments this year.

Just last month, China-based classified listings provider 58.com agreed to spin out its second-hand goods mobile commerce platform Zhuan Zhuan with $200m of funding and resources from Tencent. Tencent is a long-term investor in New York Stock Exchange-listed 58.com itself, having paid $736m for a 20% stake in 2014 before adding $100m later in the year and another $400m at the time of 58's Ganji acquisition.

And in India last month, e-commerce firm Flipkart raised $1.4bn from internet group Tencent, online marketplace operator eBay and software provider Microsoft at a post-money valuation of $11.6bn, while India-based grocery e-commerce platform BigBasket reportedly entered talks with Tencent and conglomerate Fosun for a prospective funding round sized between $110m and $150m.

But the biggest deal last month – possibly the biggest yet – involved Tencent's investment in car-hailing service Didi Chuxing's $5.5bn round at a reported $50bn valuation.

In January, Li had nominated Yao Xia, executive director at Tencent Investment, as a GCV Rising Star 2017 for this portfolio company. Li said: "He was the one to find Didi Taxi three years ago and is the driving force of our O2O social commerce practice."

In one month, therefore, and just in its larger, public deals, Tencent invested hundreds of millions of dollars putting it on track to invest billions again this year in companies that are or could be so-called unicorns – businesses worth at least $1bn.

For example, Xia noted for his GCV Rising Star profile that two of his other deals had also reached at least $1bn in value. Online retail startup Xiaohongshu – Little Red Book in Chinese – was valued at $1bn in March last year, compared with the $70m valuation when Tencent first invested in 2014's $10m B round. And used-car auction company Youxinpai was worth $2bn when it was raising a reported $400m earlier last year, compared with when Tencent first invested at a $50m valuation for the company's series B round in 2013.

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.

Tencent Investments is hoping to foster innovation in sectors such as virtual and augmented reality, driverless vehicles and pharmacology, as it drives consolidation across sectors including transport, where ride-hailing apps Didi Dache and Kuaidi Dache merged to form Didi Chuxing, a Tencent portfolio company, in February 2015.

Li said at last year's GCV Symposium in London: "We have luckily had very strong organic growth, as we make investments off the balance sheet."

Last year, Tencent posted profit of RMB41.1bn ($4.1bn), up 43% from 2015, while revenue rose 48% to RMB151.94bn as WeChat's monthly active user numbers hit 889.3 million at the end of the year.

Tencent Investment is also taking an interesting approach to its portfolio companies, choosing to treat them as business units rather than separate entities, and Li said e-commerce company JD.com, in which Tencent owns a 20% stake, benefits significantly from that partnership model.

About 80% of Tencent's deals have been conducted in China, though Martin Haemmig, an adjunct professor at Centre for Innovation & Technology Management, who introduced Li at the conference, hinted the company might increase its focus on Europe in the near future.

Li concluded his symposium keynote with his unit's philosophy, dubbed "alliance of heroes", alluding to online game World of Warcraft, stating that: "Rather than having one powerful hero in the game to play with, we try to play with an alliance of them in collaboration."

In this regard, he paid tribute to the insights from its own corporate venturing investor, South Africa-based Naspers' MIH unit, which has retained its roughly one-third stake taken more than a decade ago.

Li 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.

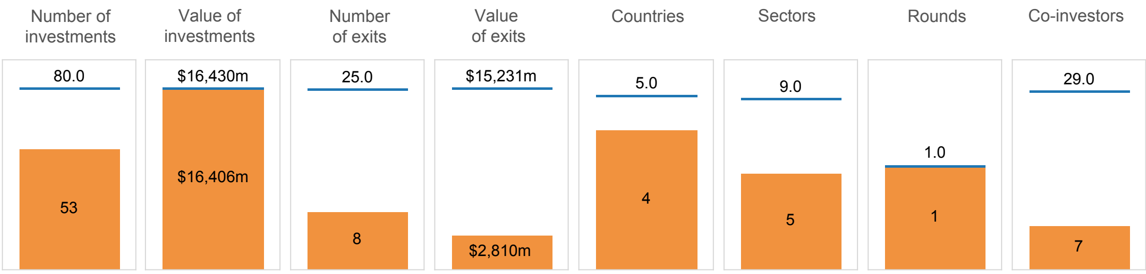
Li joined Tencent in 2011 and launched and led Tencent Investment's efforts to penetrate key O2O sectors, including automotive, education and healthcare. He was responsible for Tencent's investments in Huayi brothers, Zhihu, Netmarble Games, Howbuy and many others around the world.

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 2016



3

Wendell Brooks INTEL CAPITAL

Often the best assessment of a person's importance comes from the company's CEO and team. Such is the case with Wendell Brooks, president of Intel Capital and senior vice-president of the US-listed chip maker.

Brian Krzanich, Intel's CEO, said: "Wendell has a unique combination of deal-making expertise, leadership and strategic vision that makes him integral to Intel's transformation.

"In leading both our strategic transactions and our equity investments, Wendell's focus is to drive growth for Intel. In just a short time, he has refocused and re-energised Intel Capital while acquiring new assets that advance our strategy – from FPGAs [field-programmable gate arrays, customisable chips] to autonomous driving solutions and more. I am very pleased with Wendell's leadership of Intel Capital and look forward to his important and ongoing contributions as Intel transforms from a personal computer company to a data company."

This view is reflected within Intel Capital, too. Tamiko Hutchinson, Intel Capital's chief of staff and a GCV Rising Star 2017, and Lee Sessions, managing director leading its global summit and technology days responsible for 4,744 customer introductions to portfolio companies last year, said: "We have been with Intel Capital through several great leaders – and we can truly say that it is a most exciting time to be here now."

Brooks leads a range of strategic activity, including the corporate venturing program, Intel Capital, and Intel's mergers and acquisitions, strategic licensing and business development activities.

He oversaw Intel's largest acquisition, Altera, a $16.7bn deal to support Intel's push into data centres. It was the second-largest division for revenues based on results from the first three months of last year, and growing. Intel has been pushing strategic change, as its biggest division, client computing, offsets falling unit sales through price rises in the wake of the shift from personal computers to mobile.

Brooks joined Intel three years ago after helping sell Intel Media to Verizon as an investment banker at Allen & Co leading its Europe office, having formerly been a technology, media and telecoms (TMT) banker at Citi for nearly 15 years.

More recently, Brooks in March led the $15bn Mobileye acquisition to help it move into autonomous vehicles and assisted driving. He was promoted last year to senior vice-president at Intel, reporting to Krzanich after the retirement of Arvind Sodhani, and said he wanted to impact Intel and society.

In pursuit of social impact, last year Intel Capital expanded its Diversity Fund, broadening its mandate to seek entrepreneurs who are members of the lesbian, gay, bisexual, transgender and queer communities, disabled people and military veterans in the US.

Brooks said: "Instead of having a separate, small team focused on diversity investing, we have made investing in diversity an expectation for all our investment managers. In addition to sourcing startups led by diverse teams, they encourage current portfolio companies to seek out diverse candidates for their senior management teams to increase their diverse representation. Through these efforts, we have seen the number of diverse companies in our portfolio grow to 28, representing a collective $111m investment."

This, however, remains a fraction of Intel Capital's dealflow. Last year it put $455m into 87 investments, including 34 new deals, with more than 40% of the dollars invested outside North America.

Intel Capital is seeing its average deal size grow as it reduces the number of new deals from about 50 a year to about 30. Brooks said: "Taking more meaningful ownership positions enhances our ability to drive value for our portfolio startups, not just in terms of dollars but in terms of our value-added services – and especially in terms of Intel's technical and business expertise. We led nearly every one of the new deals we did last year."

This year is also off to a strong start, he added, with more than $400m invested in new and follow-on deals in the first quarter (Q1). These Q1 deals included co-leading a $10m series A round for US-based online specialty food marketplace Goldbely.

And Brooks said "the exit cadence also continues to be brisk", with seven portfolio exits in Q1 including the first flotation, Fibocom in China , and agreed exit of US-based iris recognition technology producer Delta ID in a $106m acquisition by identity verification technology provider Fingerprint Cards.

Since then, Intel, Unilever and Bauer Media will exit online recipe recommendation platform Yummly, which was valued at $100m as of 2015, in an acquisition by appliance maker Whirlpool, and US-based big data software provider Cloudera has gone public in a $225m initial public offering.

Intel Capital had 25 portfolio company exits last year, including two initial public offerings, which the company said was about "on par with our historic average over the past decade-plus", although the company is planning to reduce its overall portfolio size to focus on its strategic priorities and the companies it can help most.

Brooks said: "In 2017, we will continue to invest in companies where Intel technology can deliver a significant market advantage. I am excited about investing in pathfinding new technologies for Intel and our industry.

"This year we are looking especially to drive value around artificial intelligence, autonomous driving, merged reality (augmented and virtual) and 5G, as well as the data centre and immersive sports and entertainment."

These are all important strategic areas for Intel. Brooks said: "At the Global Corporate Venturing & Innovation Summit in Sonoma in 2016, I said corporate investing requires more than financial returns. As a corporate VC, our charter is to drive shareholder value, make pathfinding investments for the future of the corporation, impact business unit strategy going forward, and contribute to social responsibility. Over the past year, I have transformed Intel Capital in order to help transform Intel.

"As Intel Corporation continues its transformation into a data company, we are building a strong ecosystem with technologies such as automated driving, artificial intelligence and 5G. Intel Capital is engaging in C-level and board-level strategy discussions. We are investing significant capital around the world, in venture capital equity investments and other strategic transactions.

"Nearly every business is being revolutionised by data and the ability to capture, connect, analyse and interact with it. Intel Capital has helped to find new technologies and opportunities for Intel. Our investments have formed the core of new Intel business units. I currently oversee Intel's sports business, which is reinventing the way people consume sports with immersive experiences.

"This new business unit was formed with Intel technology and a number of equity investments and acquisitions that began as venture investments, including Voke and Replay. Our investments in areas such as athletic performance further support the growth of immersive sports.

"All of these drive large amounts of data and make use of Intel's compute power and end-to-end connectivity.

"A second new business group emerged after our acquisition of Nervana. We initially considered an equity investment in this pathfinding company, then realised an acquisition would better suit Intel's growth strategy. We acquired the company last year, and recently announced it is the core of the corporation's new artificial intelligence business group, reporting to our CEO.

"These two examples reflect the change I have been driving. Intel Capital has an incredible track record of making investments in innovative technology sourced from around the world. Last year I made several changes to help accelerate our velocity. I wanted to leverage the capability of our strong team in our decision-making. I reorganised and empowered my staff, increasing their scope and decision-making authority to span equity investing, M&A and corporate development deals.

"Their roles require a deep understanding of our corporate strategy and the ability to see the future – sometimes before the business units themselves see it. Leveraging talent across the organisation has enabled us to move faster and engage with startups in the best way for a given situation.

"A single deal team can explore any kind of strategic engagement with a company, with structures that range from licensing to equity to M&A, and transition between any of these alternatives seamlessly for customised, optimal results. With greater agility and fewer handoffs, the team is able to move faster and do the right deals at every stage.

"I am proud of the team's capability. My direct reports have a scope and decision authority equivalent to corporate venture capital leaders in many corporations. I have set challenging goals, judiciously expanded the scope of everyone on my direct staff, and created a more focused collaborative team to find and execute the best deals and drive development of our portfolio. I am pleased this was recognised by Intel Corporation's leadership – four managing directors were recently promoted to vice-president. We are honoured that GCV has selected several of our leaders as Rising Stars in recent years.

"One of my key objectives, from the time I joined Intel, has been to capture the full value of the investment thesis for each transaction. I started this by increasing our focus on post-acquisition integration. Last year, I put substantial focus on portfolio management with the same objective in mind. The first thing we ask ourselves when we engage with a potential investment is: 'How can Intel help this startup grow?'

"We spent quite a bit of time early last year looking at our full portfolio and making sure we are positioned to help them succeed. Together with a fuller suite of tools to help our portfolio companies, we have sharpened our ability to serve a technology startup or private company at any stage of the entrepreneurial lifecycle, up to and including helping them exit.

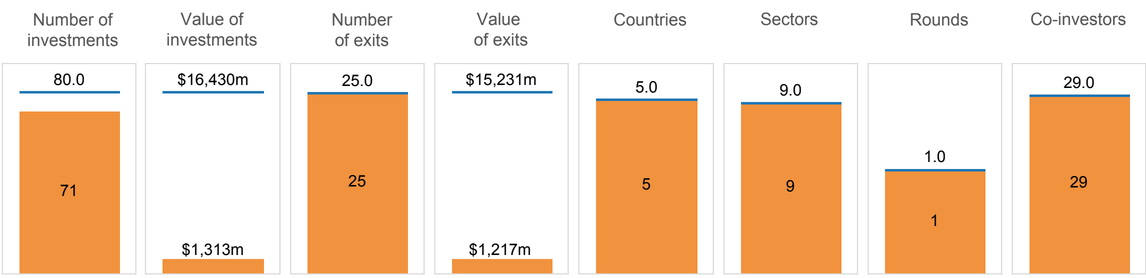
"We established a portfolio management team to help our portfolio companies connect and work with the right technologists and business unit leaders within Intel in a more systematic way. We are designing engagements with dedicated teams and with Intel business unit leaders to advise and advocate for our startups, and really leveraging the resources of Intel."

Intel said its introductions through its technology days and global summit between its Global 2000 customers and business units with portfolio companies had led to more than $91m in new or expected business in the past four years.

The company said its global summit generated a huge amount of press coverage for its portfolio companies, providing a level of visibility equivalent to more than $90m in advertising spend.

Given such leadership by Brooks and Intel, it is just a fraction of the true value of the relationship to all sides.

Intel's investment activity since the beginning of 2016



4

Larry Illg NASPERS

It is somewhat ironic that one of the world's most successful venture investors for nearly 20 years only last year formally set up a unit using the word "ventures".

Then again, South Africa-listed media and commerce group Naspers has always been iconic following its initial standout success in backing China-based media group Tencent, with its near-$300bn market capitalisation, and then following up with a host of other landmark deals in emerging markets around the world.

But its 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 this 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, and last month hired Martin Tschopp as COO for Naspers Ventures.

Naturally, these moves raised the question of whether Naspers would focus on expanding the e-commerce activities that had helped fuel its rise. Also last month, Naspers, a shareholder of the Takealot South African e-commerce platform since 2015, invested about $72m to boost its stake to more than 53%, a few weeks after exiting Middle Eastern e-commerce company Souq in a $650m purchase by Amazon. Separately, its portfolio company Flipkart, raised $1.4bn from Tencent, Microsoft and eBay, which was formally announced alongside the acquisition of eBay's India business.

But apart from reinvesting in Movile in Brazil, the initial venture deals under Illg and Russell Dreisenstock, head of mergers and acquisitions and international investments at Naspers Ventures, who moved from Singapore to the US last summer, indicate instead the unit is to help Naspers develop beyond media and e-commerce.

Naspers Ventures invested in Brazil-based online lender Creditas as part of a $19m series B round that included the International Finance Corporation and existing backer Redpoint eVentures, and also led a series C round for Farmlogs, a data analytics technology producer focused on agriculture, bringing its overall funding to $37m.

The main move has been into an education division through venturing and M&A, similar to the route taken by Germany-based publisher Bertelsmann over the past few years.

Illg is board director at 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.

Van Dijk said in a press release announcing Brainly's round: "Naspers is consistently looking to invest in the leaders in markets that have global scale and the potential to be transformed by technology. The sizeable education market is a perfect fit.

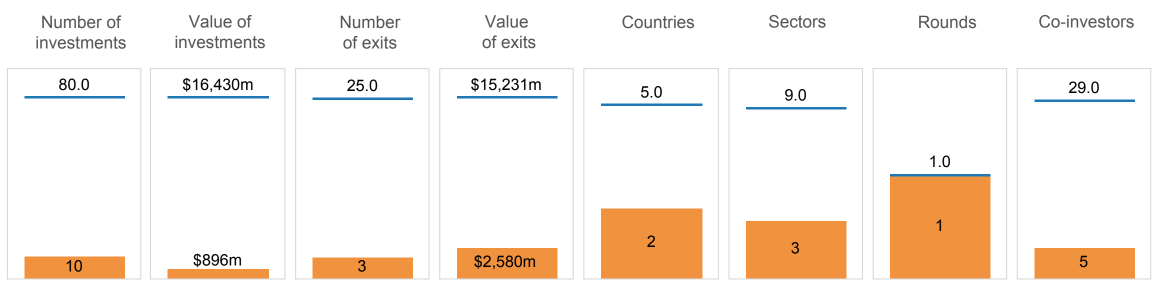
"Improving education delivery is a huge focus in every region around the globe, and Brainly has identified a way that technology can help drive educational impact beyond the traditional classroom model. What is more, they have already proven their business works across geographies and we aim to accelerate their growth and impact worldwide."

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.

Naspers Ventures is already exploring deals in India, and is seeking to invest between $10m and $50m in companies developing consumer internet, e-commerce, healthcare, education and logistics technologies in return for a minority stake.

Naspers has previously invested about $1.5bn in India-based companies, including e-commerce firm Flipkart and Ibibo, the online travel booking platform acquired by competitor MakeMyTrip last year.

Naspers' investment activity since the beginning of 2016



5

Sue Siegel GE VENTURES

In March, Sue Siegel, CEO of industrial product and appliance manufacturer General Electric's corporate venturing unit, GE Ventures, joined the board of US-based dental technology developer Align Technology.

Founded in 1997, Align produces a removable set of braces called Invisalign and a 3D digital scanning system for orthodontic or restorative dentistry dubbed iTero3D. Siegel also heads GE's healthcare innovation initiative, Healthymagination.

Joe Hogan, Align Technology's president and chief executive, said: "Sue brings a tremendous amount of experience across the corporate and private healthcare fields to our board of directors. She is actively engaged in advancing technology within the science sector and is recognised as an influential leader."

It seems an accurate summary for probably the most name-checked corporate venturer among her peers.

In January, Siegel, co-chairman of the Global Corporate Venturing & Innovation Summit, told attendees "the time is now" for the industry to collaborate with entrepreneurs. It is a statement that GE Ventures has tried to live up to as an industry leader, viewed increasingly by other groups as a model of best practice.

GE Ventures' latest deals include leading an $11m funding round for US-based workplace communication software developer Zinc.

Its 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. Siegel reports to GE vice-chairman Beth Comstock, who runs GE Business Innovations, developing new businesses, markets and service models.

Under Siegel, GE Ventures has become the primary unit backing earlier-stage entrepreneurs. 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."

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

Siegel sits on the board of US trade body the National Venture Capital Association as one of two strategic venturing representatives, the other being George Hoyem from In-Q-Tel. Her background was in healthcare investing for VC firm Mohr Davidow Ventures 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 as Kleiner Perkins Caufield & Byers had become the first VC firm to set up a life sciences group a year earlier in 1984, after it backed the first biotech, Genentech, founded in 1976.

Now, the sights and tools able to be used have broadened. In a profile published in March last year by GCV, 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.

She said five new businesses had been created over the past 18 months through New Business Creation, a practice area led by Risa Stack. 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.

Among these new business creations has been Evidation Health, a digital healthcare company using predictive analytics to improve patient outcomes. Evidation is the result of a collaboration between GE Ventures and Stanford Health Care, the university hospital of Stanford University. Last month, Evidation raised $10m, led by Sanofi-Genzyme BioVentures. GE Ventures and B Capital were return investors.

Other startups being created are Current, which aims to provide a sustainable energy ecosystem, and GE Fuel Cells, which has developed fuel cell technology that uses stainless steel instead of platinum and rare metals to reduce costs and increase efficiency.

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. 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".

And 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".

She 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."

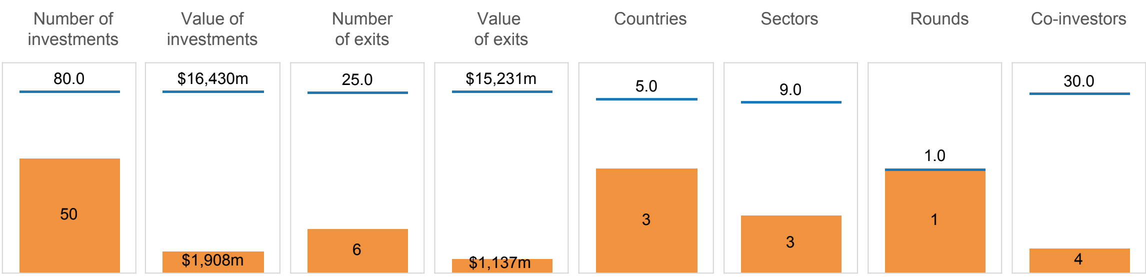
To date, GE Ventures has inked more than 100 equity deals, and technology and commercial collaborations across its five focus areas – software and analytics, healthcare, energy, advanced manufacturing and corporate productivity and operational efficiencies.

In terms of investment trends, Siegel said for last year's Powerlist 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".

GE Ventures, therefore, is increasingly seen as an effective tool to drive the innovation and growth inside the parent. As Siegel said in a speech at the GCV Rising Stars awards in Sonoma, California, in January last year: "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 2016



6

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.

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.

He said: "We expect that this year we will close on as many investments as last year. One company we invested in [Torax Medical] was acquired by J&J and we made a very significant investment in the [$900m] series B of Grail."

Although the deal was led by VC firm Arch, J&J made the largest investment in cancer treatment company Grail through an affiliate, Johnson & Johnson UK Treasury. The $900m round in March was just a first close, with further funding expected by institutional investors later that month, the company said, with a regulatory filing indicating $914m in total had been placed by investment bank Goldman Sachs by mid-month.

In his annual statement for 2016, Heyman recognised the hard work of his team and the experience gained from working with other innovation units over more than 40 years. He said: "One way to visualise our impact is to look at the many critical investments we have made, each one representing our commitment to help an emerging business move closer to improving lives.

"This year [2016] included a significant investment in a company that invented a tiny eye implant that drastically improves near-vision. Another went to a company developing novel drugs to treat behavioural problems associated with brain disorders, and yet another is helping finance a potentially revolutionary medical device designed to improve cardiovascular function. And there were many more – each addressing a dire healthcare need.

"Numbers also help tell the story of impact: We closed out 2016 with a portfolio of over $1bn, having completed more than 60 investments in private and public companies. About 35% of our investments were new, versus follow-on. This comprised a total of over $200m of capital deployed. As we continue to create new strategic options for our consumer group, we had five new investments in this sector."

Heyman added: "Important to note is that since 2015, we had nine onboarding events of companies in which JJDC had an equity investment. For us, onboarding is an important goal because we are strategic investors."

Heyman has also retained his role since 2008 as 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.

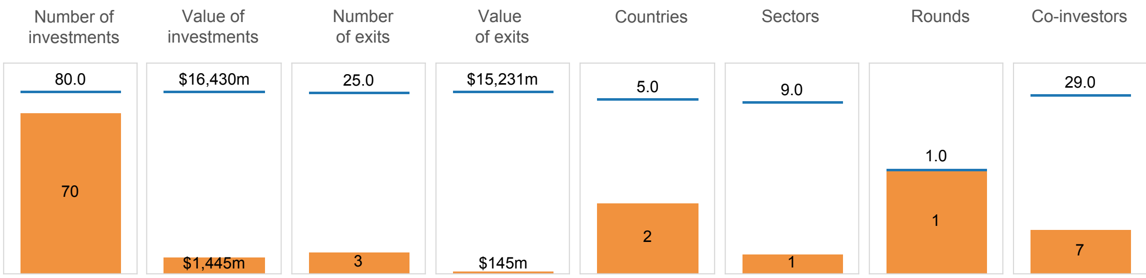
He was also responsible for acquiring companies for J&J, including Tibotec, Centocor, Cougar

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 two years since he took over.

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 2016



7

Shobhna Mohn BERTELSMANN

Germany-based Bertelsmann is one of the world's oldest and largest media, services and education groups with more than 117,000 employees and €17.1bn ($19.1bn) in revenue last year.

In the past year, Bertelsmann, which traces its book publishing back more than 180 years, laid out how it would navigate the upheaval and continue its growth with a focus on education as its third main business line alongside media and services, and making corporate venturing through Bertelsmann Investments one of its eight divisions.

Thomas Rabe, CEO of Bertelsmann, 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."

Shobhna Mohn, executive vice-president for growth regions at Bertelsmann, for a profile on the company published last September, 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."

With a focus on growth regions, Pankaj Makkar, managing director of Bertelsmann India Investments (BII) since its foundation in 2013, and Marc Puskaric, managing director of Bertelsmann Brazil Investments (BBI), which was founded in 2012, two of Bertelsmann Investments' four "investment platforms", report to Mohn.

Growth regions include China, but Annabelle Yu Long, managing partner of Bertelsmann Asia Investments (BAI) 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.

The fourth investment platform, Bertelsmann Digital Media Investments (BDMI), covers the US and Europe. Urs Cete, managing partner of BDMI, is not on the GMC but reports directly to Rabe, who is also CEO of Bertelsmann Investments.

These four platforms have been increasing their activity, with 34 investments and follow-on deals, including five exits, by the end of July last year, compared with 39 in all of 2015, according to an internal list seen by GCV. BAI, with 15 exits and investments by the end of July, made nearly half these deals, with five in India and the remainder primarily focused on the US and Europe through BDMI.

At the end of August, in its interim results for the first six months of the year, Rabe said: "BAI once again generated considerable earnings from sales of holdings – €55m to be precise. Total gains from disposals at BAI since the inception of the fund now amount to nearly $200m [actually $194m] – so we are earning real money in China. 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."

Bertelsmann Investments' results are determined mainly on the basis of earnings before interest and taxation (ebit), which increased to €42m compared with an ebit loss of €7m in the first six months of last year. With Bertelsmann's overall profit of €482m, the company said: "Capital gains from exits of Bertelsmann Investments shareholdings – primarily at BAI – thus contributed significantly to the group's earnings."

Excluding the five investments struck in July – Treebo in India, FloSports in the US, and including Zaihui and DS Movie in China, plus a third by BAI which is confidential – Bertelsmann Investments' 24 deals in the first half of last year would put it in touching distance of the most active venture investors, such as New Enterprise Associates (56), Sequoia (50), Accel (47), Kleiner Perkins Caufield & Byers (37) and Intel Capital (33), according to data provider PitchBook.

Since then, its most recent deals include Sliver.tv, a US-based virtual reality platform aimed at eSports backed by a range of corporates, which raised $16m, and UCloud Information Technology, a China-based cloud computing company backed by media group Bertelsmann and conglomerate Legend Holdings, which raised RMB960m ($139m) in series D funding. Its next set of exits could include China-based e-commerce platform Fenqile in an initial public offering in the US expected to raise $600m.

The increased focus by Bertelsmann Investments' four regional platforms also ignores increased corporate venturing activity by the media group's other business units, such as Gruner & Jahr and Arvato Financial Solutions, a financial services subsidiary of media group Bertelsmann, which in March co-led a €26.3m ($28m) series A round for Germany-based financial services marketplace SolarisBank..

Collectively, therefore, Bertelsmann has been increasing its focus on taking minority and majority stakes in entrepreneurs over the past few years under the direction of its senior officers.

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.

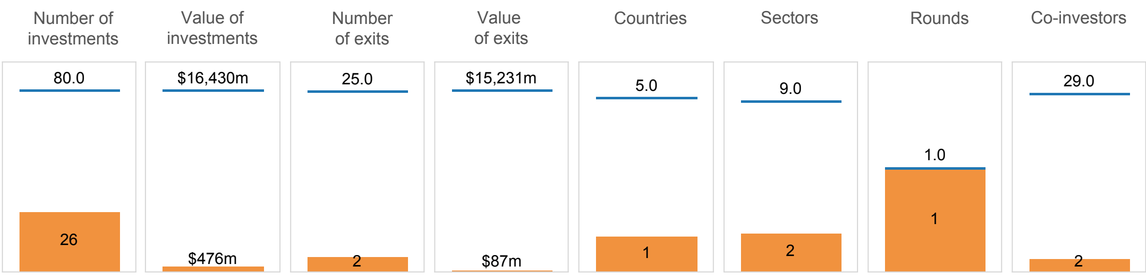
Bertelsmann is controlled by the Mohn family and the Bertelsmann Foundation after it spent €4.5bn in 2006 on buying back shares traded to Groupe Brussels Lambert for control of entertainment company RTL Group.

But while Rabe was hired from outside the family, the ties between owners and managers is close.

Mohn is married to Christoph Mohn, chairman of Bertelsmann's supervisory board since 2012 – which oversees the executive board – Christoph's sister, Brigitte Mohn, is chairman of the board of trustees, and their mother, Liz Mohn, is vice-chairman of the executive board.

Liz was the second wife of Reinhard Mohn, the fifth generation of the family to run the business, who built the company into a media conglomerate through the second half of the 20th century. He died in 2009.

Bertelsmann's investment activity since the beginning of 2016



8

Lin Wang JD.COM

Lin Wang, senior director of finance at Asia-based e-commerce provider JD.com, and his colleagues have been busy growing a company to a value of about $30bn.

US retail giant Walmart has increased its stake in JD.com to 12.1%, deepening its partnership with China's second-largest online shopping platform behind Alibaba, according to a securities filing reported by China Money Network.

In a six-month period, therefore, Walmart more than doubled its shareholding in JD.com from 5.9% last June, when the two companies struck a wide-ranging partnership. In that agreement, Walmart sold its fully-owned Chinese e-commerce player Yihaodian to JD.com in exchange for a 5% stake in JD.com worth about $1.5bn.

JD.com has turned into a business with this striking valuation through adept corporate venturing and acquisitions.

Backed by Tencent, JD.com – also known as Jingdong Mall – ranked fifth in the latest GCV sector power Index. Its deals include investing $200m in China-based last-mile delivery services provider Dada Nexus, which also merged with JD's logistics subsidiary JD Daojia. The merged company continues to operate under the Dada Nexus brand. Founded in 2014, Dada Nexus runs a crowdsourced delivery platform serving 37 Chinese cities and boasting 1.3 million delivery contractors.

JD.com's JD Finance subsidiary, created out of a company reorganisation the year before, raised $1bn in its second round at the start of last year, and in March was seeking a $7.3bn valuation in a new 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 is expected to be completed by the middle of this year and will provide 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.

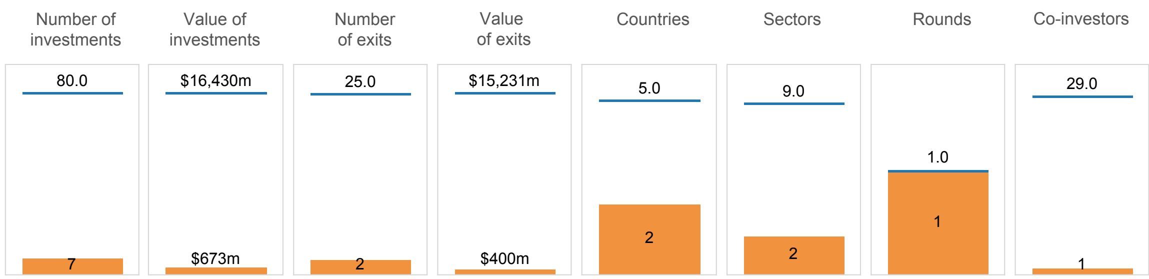
The funds raised by JD has encouraged its push into other deals. Yixin Capital, a China-based online automotive financing subsidiary of automotive retail services provider Bitauto, raised $550m from a consortium featuring its parent company. Investors included local corporations such as JD.com as well as internet companies Tencent and Baidu. In June last year, Baidu, Tencent and JD.com invested $50m in Bitauto to own 3.2%, 7.1% and 23.5% of the company respectively. Huang sits on Bitauto's board.

William Li, CEO and chairman of Bitauto, said at the time: "Through our cooperation over the past year with JD.com and Tencent – China's leaders in world-class e-commerce, social media and big data – we have gained tremendous momentum in making Bitauto the industry leader in online automobile transactions."

China-based healthcare app developer Kingdee Healthcare raised about RMB100m in a series A round co-led by JD.com, according to China Money Network. JD.com, which in 2015 paid $168m for a 10% stake in Kingdee Healthcare's Hong Kong-listed parent company, enterprise software producer Kingdee International Software, co-led the round with financial services firm Yongjin Group.

But JD's sights are not limited to China. At the turn of last year it invested $55m in US-based shopping app Wish, which by the end of last year was seeking $500m.

JD.com's investment activity since the beginning of 2016



9

Alvin Wang Graylin VIVE, HTC

Few people graduate from GCV Rising Star to Powerlist so quickly as Alvin Wang Graylin, China regional president of Vive, HTC.

But then few people cram as much in to their years as he manages in a quarter. He said: "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.

Wang Graylin added: "Also, I have just helped close a between Warner Brothers and Vive to make us the exclusive virtual reality (VR) content and distribution partner for Ready Player One, the most anticipated movie relating to VR so far – a $450m budget picture directed by Steven Spielberg which releases in March 2018.

“I have also just closed a deal to open 100-plus VR cinemas in China this year. And announced a deal with the China government to form the leading VR research institute in China, headed by the father of VR, Tom Furness, my VR professor from 25 years ago.

“Also, the Industry of Virtual Reality Alliance, which I helped form last September just released the world’s first government-approved industry standard for VR head-mounted displays. Been a busy first quarter.”

This followed a busy second half of last year for Wang Graylin.

In November, 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.

Wang Graylin said for his Rising Stars profile: “The Shenzhen SEZ has one of the most progressive governments in China, and has a history of growth and innovation for the past 30 years. It is also becoming a key centre of innovation for the mobile internet and smartphone industry globally.

“When we were approached by the Shenzhen government to set up such a fund and a VR research centre jointly, we felt it would be a very complementary relationship and would provide a strong foundation for driving growth for VR in China and globally.”

Part of Shenzhen’s interest in HTC lay in the groundwork Wang 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, Wang 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.

Wang Graylin is also chairman of the Industry of Virtual Reality Alliance, launched in September as the only government-endorsed VR organisation in China.

In May, the Chinese government issued its National Innovation-driven Development Strategy Outline, which highlighted the need to develop a new generation of information network technologies, enhance VR technology research and industrial development, strengthen the IT Infrastructure for economic and social development, promote innovation in industrial technology, and form new development opportunities.

These connections helped drive entrepreneurs to HTC and create the dealflow for the VR fund along with HTC's own Vive X VR Accelerator, set up in July with $100m.

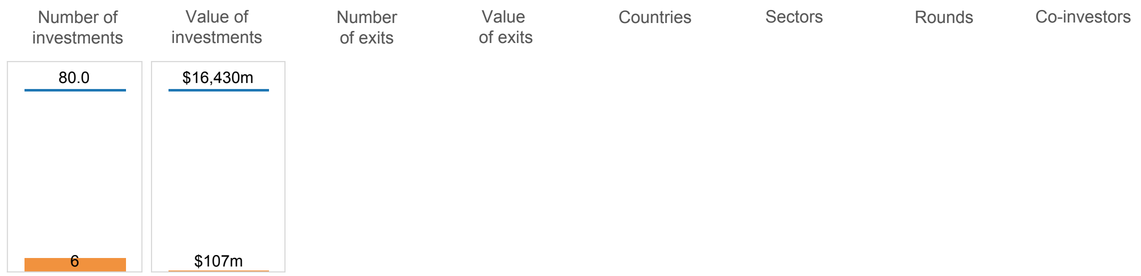
Such speed and scale creates both opportunities and challenges. Wang Graylin said for his Rising Stars profile: "Our biggest challenge with the investment arm has been speed of deal execution and legal complexity. The companies we are looking at come from all over the world and with differing company 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, Wang 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."

Wang 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."

HTC's investment activity since the beginning of 2016



10

Ethan Xie ALIBABA

China-based online retailer 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 last summer 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 but which retains a profit share and convertible equity option, the group has strong potential inside and outside China.

Alibaba and Ant Financial co-invested in the $4.5bn equity round for ride-hailing service Didi Chuxing, which closed in July last year and this month raised $5.5bn at a $50bn valuation. This would make Didi Chuxing the second most valuable private company after Uber.

Overall, therefore, Alibaba was the top corporate investor from the consumer sector, accounting for the highest number of disclosed rounds, according to GCV Analytics. Alibaba participated in five of the top 10 deals over the previous year, including Ele.me, an online platform for ordering food deliveries from restaurants and takeaways, chauffeured lift-ordering service UCar and Yiguo as well as Didi Chuxing.

Alibaba also took part in a $568m round for UCar, and invested $1.25bn in Ele.me. It invested $900m while its financial services affiliate Ant Financial supplied $350m, the two taking an aggregate stake reported to be 27.7%.

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 last year.

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 at the time: "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 heads the academy.

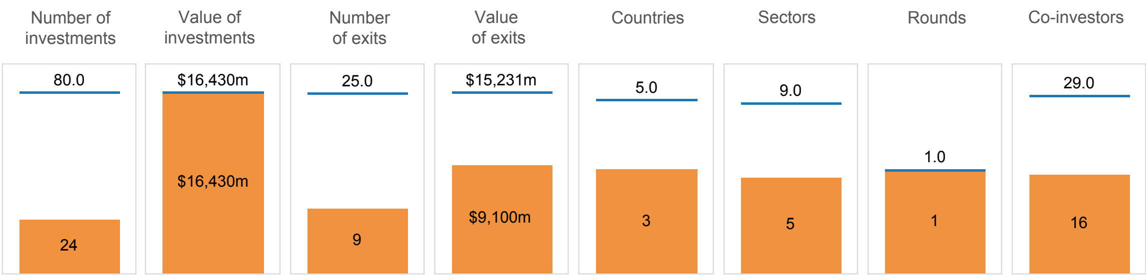
Alibaba's strategic investments fall broadly into three groups – e-commerce, media and online services. E-commerce deals have ranged from department store owner InTime to flash sales company Mei.com and logistics service YTO Express, as well as Lazada and Snapdeal.

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 2016



11

Nagraj Kashyap MICROSOFT VENTURES

Nagraj Kashyap, head of Microsoft Ventures, has had a flying start to his tenure at the US-listed software provider.

He said: "In general I am proudest of the incredibly diverse team I built in short order – less than seven months after joining Microsoft – and the incredible momentum we have established with VCs and entrepreneurs.

"We closed 22 investments last year from a standing start, 19 publicly announced, and another eight in the last three months, not all announced, and that included investments in the US, Israel and Europe. We led four deals and we also announced an atrificial intelligence fund last December and made our first investment out of the fund in Montreal-based ElementAI.

"In 2017, we will officially have a team on the ground to cover Europe [having hired Itxaso del Palacio this month] and India, and I expect a similar pace of investment as last year – maybe slightly higher. We are already seeing up-rounds in our portfolio, but exits will take a little longer given that we started in 2016.

"We are already seeing tremendous cooperation between portfolio companies and Microsoft, and I expect to increase the dedicated portfolio development team to make an even stronger mutual impact for Microsoft and our portfolio."

Recently, Microsoft Ventures co-led the $7.6m second tranche for US-based artificial intelligence technology developer Bonsai and led cybersecurity technology developer Synack's $21.3m C round.

In an interview with Andrew Gaule for Global Corporate Venturing, Kashyap said: "Microsoft has a history of working with startups. We have also invested in the later stages, coupled with a strategic business agreement. What I came in to do was to extend that relationship in working with startups, but more on the early side. So a specific focus of the fund is to work with startups very early, starting in a series A and beyond, without the requirement for any kind of strategic relationship with Microsoft at the time of the investment.

Microsoft offers portfolio companies three services:
- Technical integration with one of Microsoft's products, such as Azure or Office 365.
- Go-to-market help, using Microsoft's enterprise sales team.
- Promotional services, such as featuring a portfolio company at a Microsoft-held conference.

Kashyap told Gaule: "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.

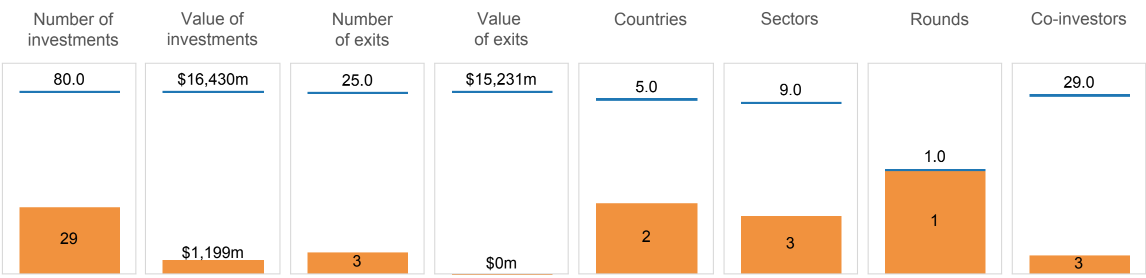
For the Powerlist 2016, Kashyap said: "At Qualcomm, I was lucky enough to be part of a company that led the charge in the smartphone revolution, enabling creation of many of big companies of the past few years, including Waze, Xiaomi and Uber. I believe that the transition to the cloud will result in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



12

David Krane GV AND David Lawee, CAPITALG

The development of conglomerate Alphabet's corporate venturing units, GV and CapitalG, has been a closely-watched story over the past year after, in early August, Bill Maris stepped down after seven years as head of the subsidiary formerly known as Google Ventures.

David Krane took over as managing partner and CEO and has retained consistency with the Maris era in the first half a dozen investments made since the transition. This is perhaps to be expected, as Krane had been a general partner at GV since 2010 before stepping up as managing partner in 2014. The two largest rounds of those featuring GV since 10 August have been in healthcare.


David Krane


David Lawee

Cancer-focused biotech company Carrick Therapeutics emerged from stealth with $95m in funding after licensing one of its three drug candidates from Cambridge University, and hopes to secure more academic research in future to enhance its portfolio.

GV led a $70m round in August for US-based immuno-oncology startup Arcus Biosciences that included Taiho Ventures, the corporate venturing subsidiary of Taiho, as well as Invus, Droia Oncology Ventures and Stanford University.

Additionally, the unit led a $32m funding round for US-based palliative care provider Aspire Health, which was also backed by Blue Cross and Blue Shield Association.

GV has been increasingly active in life sciences and health technology since 2014, with the sector making up 31% of its investments in 2015. Some of the most notable deals in terms of total round size were led by Krane, including investments in ride-hailing service Uber, smart thermostat maker Nest and crowdfunding platform CircleUp. Since he took over, GV has continued its interest in these areas.

GV led a $14m series A round for art-buying platform Twyla, which has just come out of stealth, joined the $20m B round for last-minute ticketing app Gametime, and contributed to the $47.5m equity round closed by online lending platform developer LendUp.

Most of the Maris-era deals were mid or late-stage rounds beyond series B, though it started in 2009 with a heavy investment pace by volume in seed and early-stage deals. Maris, who has reportedly since been raising new a fund, co-founded Google Ventures in 2009 with an initial budget of $100m a year which was soon increased. GV currently invests about $500m a year and had some $2.4bn under management as of December 2015.

GV was not mentioned in the recent post-Maris rounds for Cosy and EventBoard, having fetaured in both their seed rounds. Other portfolio companies, including cybersecurity software developers Pindrop Security, Anomali and Shape Security, and 3D printing technology developer Carbon have added to rounds in which GV had invested in the past year or so.

Its most recent deals this past month include leading Soylent's $50m series B round, which will support the food substitute's entry into brick-and-mortar stores, GV leading a $50m round for US-based stem cell transplantation technology developer Magenta Therapeutics, and backing geospatial software technology provider Orbital Insight's $50m series C.

Krane is, however, celebrating an exit. Having previously acquired GV portfolio company Nest, Alphabet acquired Urban Engines for an undisclosed amount.

While GV has maintained its activity since the formal handover to Krane, other parts of Alphabet have retained their interest in private companies.

Google itself, now operating as Alphabet's largest subsidiary, is also reportedly funding startups formed by ex-team members, including social network Hello, independently to Alphabet's GV and its CapitalG activities.

In 2012 it emerged David Lawee had taken charge of late-stage venture unit CapitalG (formerly Google Capital). His unit's general remit covers later-stage private technology companies where Google has no expected interest in acquiring the company but can offer help beyond cash. Lawee was previously head of corporate development and had run Google's mergers and acquisitions group since 2008. He is an observer on two of CapitalG's portfolio companies, Lending Club and SurveyMonkey, while CapitalG's latest deals include leading US-based data analytics platform Looker's $81.5m series D round and India-based mathematics education provider Cuemath's $15m B round..

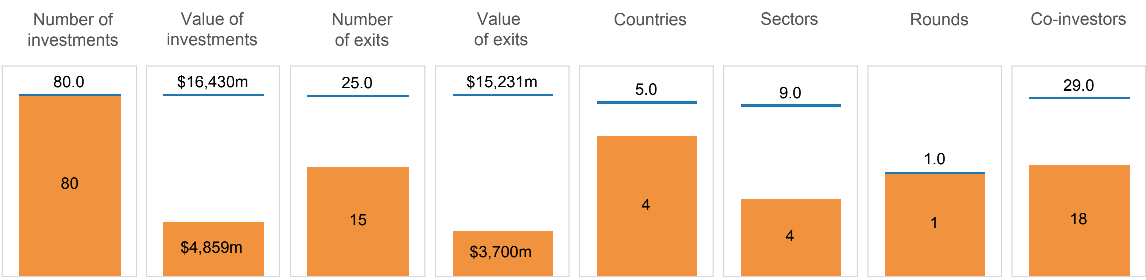
CapitalG pairs its companies with advisers spread across Alphabet, and in a six-month period has tapped 300 people to give advice to its companies, according to one of its partners, GCV Rising Star 2017 Laela Sturdy, who spoke to newswire Bloomberg at the time of her Care.com deal.

Robert Hohman, CEO of Glassdoor, said in the September 2015 issue of Fortune magazine that Sturdy had schooled Glassdoor on Google's rule for international growth, which states that every new feature should be shipped in as many languages as possible, even if it slows the pace of new releases. He said: "It is extremely convenient when you are facing a hard problem to be able to ask the question: I wonder what Google did on this?"

Similarly, when Gusto planned to review its entire payments system, which processes about $20bn a year, CapitalG asked the engineer who built the software architecture for all payments across Google to help.

Edward Kim, chief technology officer at Gusto, told news provider Recode in December 2015: "CapitalG really has carte blanche within Google to find that one person and have that one person solve our problems. They actually bring a lot more to the table than money."

Alphabet's investment activity since the beginning of 2016



13

William Taranto MERCK CAPITAL VENTURES

William Taranto has been one of the great exponents of ecosystem investing since he moved to US-based pharmaceutical group Merck & Co seven 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.

Taranto said more could be expected this year. "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."

GHI completed three new deals in 2016 – Liveongo, Arcadia and Navigating Cancer – and 11 follow-on investments – Preventice, Opgen, Patientsafe, Healthsense, Electrocore, WiserTogether, Caresync, Genome DX , Aventura, Wisertogether and Daktari.

And its deals this year include US-based cloud healthcare software developer ClearData as part of a $12m round and US-based healthcare data aggregation and analytics company Arcadia Healthcare Solutions, which raised $30m of growth capital. In addition, in March Merck was 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 Illumin.

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."

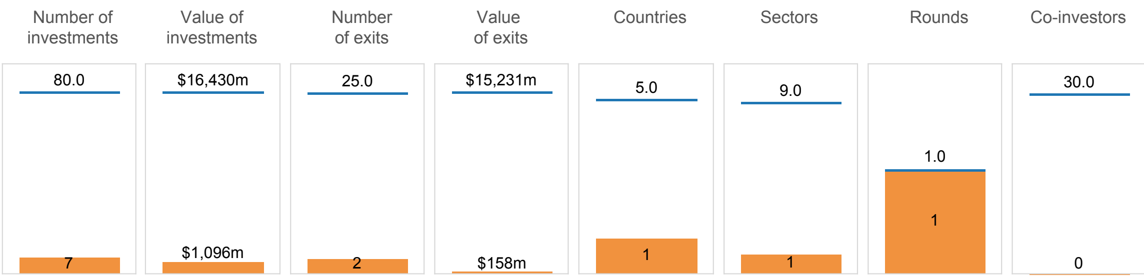
Taranto has also been looking more globally. He said: "With our hiring of Francesca Wuttke, we look to deploy capital in 2017 and beyond in Europe."

Taranto came to Merck from a similar role at Johnson & Johnson.

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 2016



14

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 has been a challenging time for US-listed chip maker Qualcomm.

But, while Quinn Li's promotion to the top corporate venturing role last year 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-chair the Global Corporate Venturing & Innovation Summit in Monterey next January.

One exit, Qualcomm's early investment in automous driving startup Cruise, was a high-profile win when General Motors bought it for $1bn, while data software producer MapR has reportedly hired Goldman Sachs for an IPO expected to raise between $150m and $200m.

So far this year, Qualcomm Ventures' public deals have included secondary storage technology provider Cohesity's $90m series C round, data centre equipment developer Innovium's $38m C round, finance transfer app Viva Republica's C round extension, database technology developer ScyllaDB's $16m B round, patient medication tracker Medisafe's $14.5m B round, drone airspace management software developer AirMap's $26m B round, virtual reality imaging technology provider Lytro's $60m round, the emergence from stealth of ClearMotion with $100m, video conferencing software producer

Zoom's $100m D round and smart doorbell producer Ring's $109m round.

Earlier deals from Qualcomm included software-defined storage technology developer Weka.io. Li effectively summed up its overall strategy, saying: "We invest in companies that are building highly disruptive technologies."

At this 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.

Li works with Brian Modoff, executive vice-president overseeing strategy, M&A and ventures, who joined Qualcomm in October 2015 and led last year's announced acquisition of peer NXP to drive into IoT.

In February, Qualcomm launched a virtual reality headset accelerator and offered its Snapdragon 835 headset as a reference design to foster new products developed in just a few months.

Qualcomm also joined cybersecurity foundry Team8 along with Microsoft.

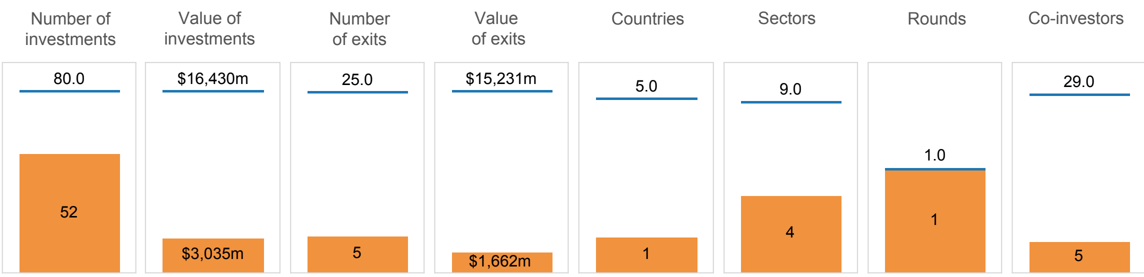
Perhaps one of the most interesting deals has been Qualcomm's reported decision to commit $1bn to SoftBank's planned $100bn Vision Fund. The two know each, with SoftBank having acquired chip designer ARM last year.

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 last year before his promotion 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 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 2016



15

Jennifer Li BAIDU

The name Baidu derives from the last line of a poem, Green Jade Table in the Lantern Festival, written 800 years ago meaning "persistent search for the ideal" and last month the China-based internet group Baidu expanded its investment team by naming its chief financial officer, Jennifer Li, CEO of Baidu Capital, its $3bn corporate venturing unit announced in October.

Robin Li, CEO at Baidu and chairman of Baidu Capital, said: "Jennifer's leadership and expertise have been instrumental to Baidu's growth over the past nine years. I am grateful to Jennifer for putting in place a talented finance organisation and robust systems that lay the groundwork for Baidu's next stage of growth. Bringing artificial intelligence (AI) to real-world applications is crucial in the AI era and I look forward to working with Jennifer in her new role to grow Baidu's ecosystem."

Before Baidu, Li worked at car maker General Motors as its China chief financial officer, and was later appointed as the financial manager for North America. Li holds an MBA degree from University of British Columbia in Canada.

Li joins Wenjie (Jenny) Wu, who was hired from online travel agency Ctrip in November as a managing partner, with Simeon Shi moving over from Ctrip a few months later to be a director, while Zhang Jinling, a vice-president at smartphone producer Xiaomi, came on board as chief financial officer in January.

Baidu Capital intends to invest between $50m and $100m at a time in AI, machine learning and virtual and augmented reality technology, and raise most of its money from third parties. Its money will come from large insurance funds, securities companies, and others, and investment institutions with a state background have also expressed interest in participating, the company said.

Baidu Capital's first deal came in March when it led an investment round into green car startup NextEV, which local media reported the overall funding round at up to $600m. NextEV already has the backing of tech giant Tencent and investment firm Hillhouse Capital.

For earlier-stage deals, Baidu in September formed the $200m Baidu Ventures unit and hired Liu Wei to Baidu Ventures, as chief executive. Liu was previously a partner at Legend Star, a venture capital subsidiary of conglomerate Legend Holdings that has made nearly 100 angel investments.

He joined Legend Star in 2011 and in his time at the unit its investments included speech recognition technology developer AI Speech and educational app developer Knowbox.

It is the first area that particular attracts Liu's Baidu Ventures it seems. A few weeks after joining Baidu, Liu partnered with Comet Labs, a San Francisco, California-based fund specialising in machine intelligence. Comet Labs provides capital, technical resources and mentoring to its AI startups and Liu was part of the founding team at Comet Labs before he became a corporate venturer.

"Baidu founded Baidu Ventures to build an ecosystem around AI technology and do investment to help AI startups with money, technology and connections to industrial players," Liu told news provider TechCrunch.

Baidu Ventures will now be Comet's main partner in China, helping connect portfolio companies with other strategic partners and a large market.

Separately, Yimin (Peter) Fang remains senior director of corporate development at Baidu leading investments and acquisitions.

Fang, last year's GCV Powerlist winner, is senior director of corporate development at Baidu leading investments and acquisitions. He used to work for US search engine peer Google's first China president, Kai-Fu Lee, as chief technologist and an investment director at Lee's early-stage company-building platform Innovation Works.

He joined Baidu in 2014 after a few months at Fidelity's Asian corporate venturing unit in order to cover strategic investments and mergers and acquisitions, with a focus on "core technology – adtech, big data, mapping, fintech, deep learning and so on – mobile services, financial services, and enterprise services", according to his LinkedIn account.

In addition to China, Fang also covers international investments, including those in the US, Europe and Israel, as Baidu plans to earn half its revenue outside China by 2020, according to a MIT Technology Review article, although its revenue growth has slowed compared with its tech peers, Tencent and Alibaba, leading to questions about its future "relevance", according to an article in the Economist last month.

Baidu's backers have included legendary US venture capitalist Tim Draper from DFJ and storied corporate venturer Hugo Shong from IDG Capital Partners.

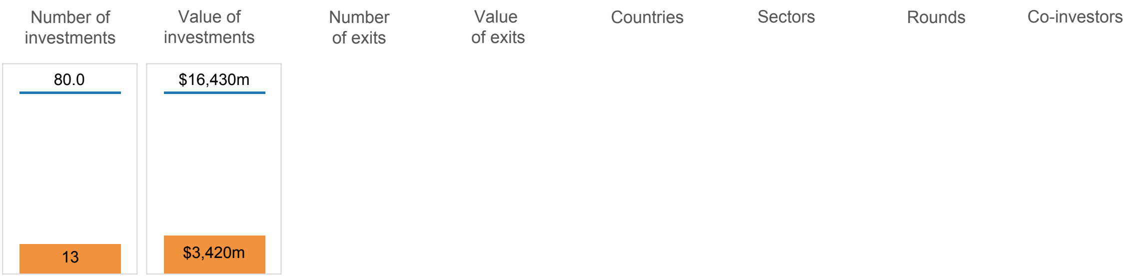
Draper said for last year's Powerlist: "I have made it my practice to spread venture capital and entrepreneurship throughout the world. I have trained hundreds of VCs. Our enthusiasm for startups must have rubbed off [on Baidu]. Corporate VC is different though. It often is not run for the long term. Robin is a long-term player. I believe if he goes after VC, he will rival Intel Capital as one of the top corporate VC players."

When asked about how China's highly competitive internet scene might be forcing or shaping a unique venture market, Draper added: "I think it is all wonderful and good for the Chinese economy. I believe VC is potentially the highest and best use of capital in the world."

Fang's experience is certainly broad as it covers electronic payments, gaming and communication during stints from before 2011 to the mid-1990s at 99Bill, NetEase and Edelman, respectively.

According to Wikipedia, Li has said the company's name was chosen as the poem, Green Jade Table in the Lantern Festival, compared the search for a retreating beauty amid chaotic glamour with the search for one's dream while confronted by life's many obstacles.

Baidu's investment activity since the beginning of 2016



16

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 listing more than 100 portfolio companies on its website, split between advertising, consumer, enterprise and infrastructure sectors. Since January, Comcast has backed smart-home technology developer August Home's $17m round, returned for student loan provider College Ave's $30m series D round, reportedly led a funding round for the adaptive wifi technology provider Plume, led a $15m series A round for lunch subscription service MealPal, joined a round for employment comparison tools Comparably, and backed smart mattress developer Eight's $5m round. Petco's purchase of petcare services platform PetCoach for an undisclosed sum, providing an exit to Comcast and Pet360.

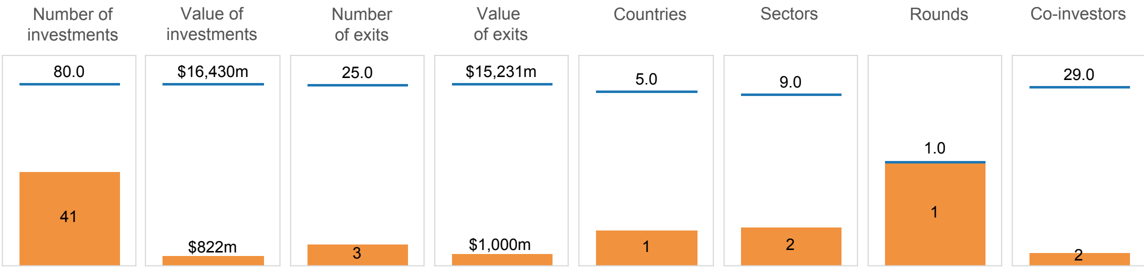
One of her biggest moves was hiring Kai Bond from Samsung Accelerator as principal, a role in which he will also head Comcast's Catalyst Fund.

The company has announced a startup assistance plan called Lift – Leveraging Innovation For Tomorrow – Labs for Entrepreneurs.

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.

Separately, in the past year, Comcast has committed $4bn over 10 years to a new investment firm being set up by the US cable operator's chief financial officer, Michael Angelakis, who has stepped down from his current position but remains a senior adviser to Comcast even as his new group, Atairos, began operations this year with group buying company Groupon as its first deal last May with a $250m investment.

Comcast's investment activity since the beginning of 2016



17

Jaidev Shergill CAPITAL ONE

Two 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. He said 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."

In February last year, US-based data-as-a-service platform Vast obtained $14m in series B funding from Capital One Growth Ventures, with Shergill joining its board.

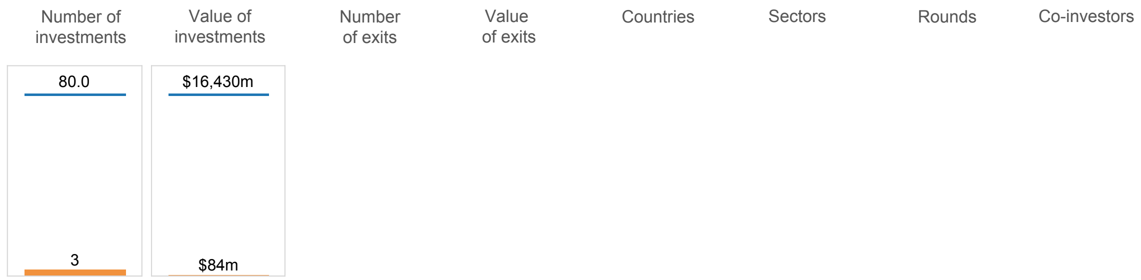
Capital One previously invested in startups through North Hill Ventures, the venture capital firm with which it was affiliated until North Hill was spun off in 2012. It also operated Capital One Labs, a San Francisco-based research subsidiary that operates as a startup laboratory, while Lauren Connolley, 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 2016



18

Jens Eckstein SR ONE

There are few venture groups that cross the threshold of investing more than $1bn, and latest to the club was GlaxoSmithKline's independent corporate venturing unit, SR One.

Jens Eckstein took over as president of SR One in 2012 and said last year it passed $1bn in cumulative investments with five new investments, three companies founded or co-founded by SR One and 29 follow-up investments.

Despite the activity this was still below the record in 2015's 54 financings – more than one transaction each calendar week – the 54 included 10 new companies, five fund-of-funds investments (legacy), one IPO participation and two public follow-ups, Eckstein said for last year's GCV Powerlist.

He said last year was "another good one" and included the "first successful graduation of a new company from the new SR One entrepreneur-in-residence initiative in an oversubscribed round – Palleon Pharmaceuticals".

Palleon was founded by Jim Broderick as a biotech company developing novel drugs for diseases characterised by dysregulation of the immune system.

SR One bagged a return with the flotation of Crispr Therapeutics and two trade exits, Nimbus Therapeutics' Apollo subsidiary to Gilead for $400m initially and up to $800m in performance fees, and UK-listed Adheron to Roche for $105m initially and up to $580m depending on performance. The Adheron deal was announced in October 2015 but closed last year.

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. Thinking back to last year, Eckstein paid tribute to a team that had remained remarkably stable over the past six years even after Kent Gossett's death in 2013.

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.

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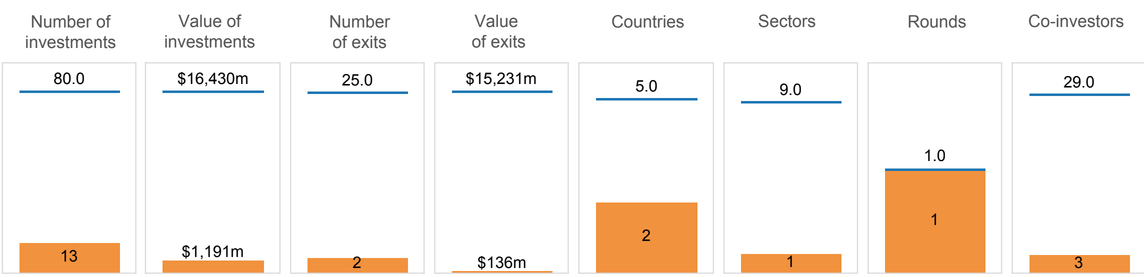
GlaxoSmithKline's investment activity since the beginning of 2016



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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 this year.

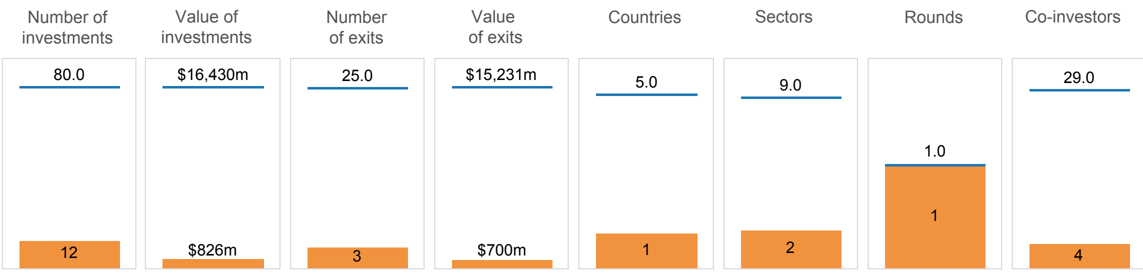
She has maintained Lam's policy of actively supporting companies. Since January, Time Warner has backed online news publisher Mic's $21m C round and female-focused online media company Bustle's $12m D round, and led a $27m B round for virtual reality company 8i.

Goldberg is a director at Bustle and her other board or observer roles include Dynamic Signal, which raised $25m, Joyus, which raised $24m in June 2015, Mashable, which raised $17m in its B round in 2015, and YieldMo, which raised $10m in October 2014.

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.

Time Warner's investment activity since the beginning of 2016



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Qing (Jean) Liu DIDI CHUXING

Didi Chuxing, a China-based ride-hailing application, has this month raised more than $5.5bn from a consortium including SoftBank, Tencent, Alibaba and Apple.

It is the largest round 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.

Taking into account the capital raised by its predecessor companies, Didi Chuxing has so far secured more than $13bn in equity funding and $2.8bn in debt financing, the latter coming alongside a $4.5bn equity round closed in July 2016.

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.

Less than a sixth of China's population owns a car, so taxis are a popular form of transport. Didi's platform completed 1.43 billion rides in 2015, spread over 300 million users in 400 Chinese cities.

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.

With another $5.5bn under its belt, Didi is preparing its global strategy. Cheng Wei, founder and chairman of Didi Chuxing, in a statement alongside its $100m series D round for Brazilian counterpart 99 earlier this year said: "We seek to work with new global partners to ensure the creation of new and better mobility services, as well as generating new job opportunities for our cities as we reshape the future of the transport system in the world."

Founded in 2012 as 99Taxi, 99 operates a ride service that offers taxis and chauffeured cars to customers in 550 cities and towns in Brazil. More than 140,000 drivers are registered and the company's app has been downloaded more than 10 million times. Didi Chuxing will take a seat on 99's board and provide strategic assistance with product development, operations and business planning.

Elsewhere, Ola, an India-based on-demand ride service backed by Didi, has raised up to $100m from its existing investors, according to a regulatory filing.

Didi has its sights set beyond cars. Didi took part in a $450m series D round for app-based bicycle rental service Ofo, valuing Ofo at more than $1bn. China-based Ofo enables users to unlock bikes using smartphones.

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.

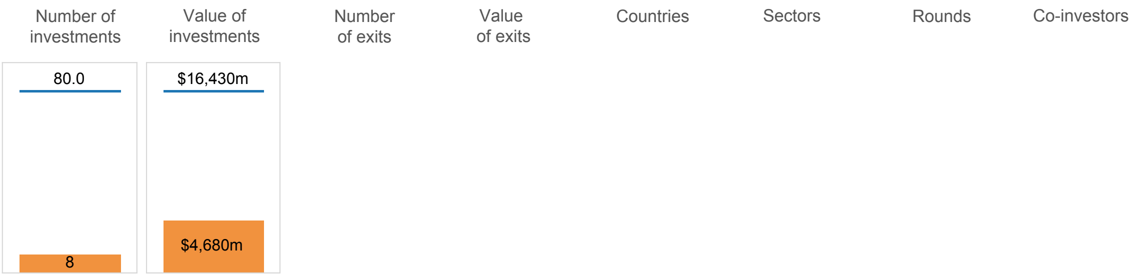
Liu added: "In the internet era, the key to a successful business is understanding the customers' expectations – and half the customers are women."

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.

Didi Chuxing's investment activity since the beginning of 2016



21

Lak Ananth SIEMENS

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

Ananth reports to Joe Kaeser, Siemens' CEO. He said: "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."

Next47 recently formed partnerships with two US-based initiatives run by accelerator Techstars, Techstars Mobility and Techstars IoT.

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."

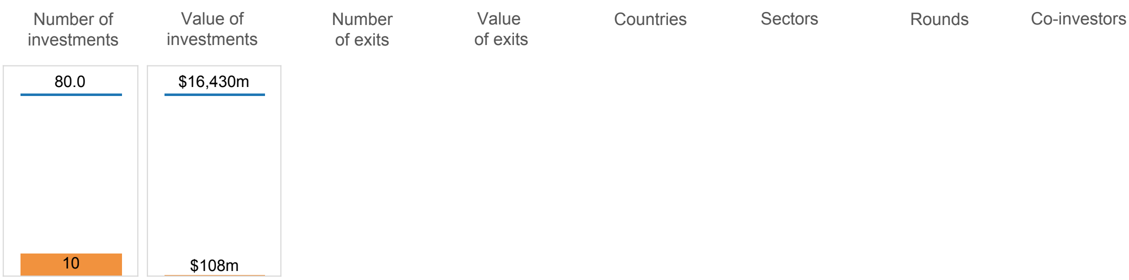
Before heading Next47, Ananth developed and built the Hewlett Packard Pathfinder organisation, bringing together innovation strategy, venture investments, acquisitions and partnerships.

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.

Siemens will invest an additional €1bn in disruptive technology companies through Next47 – a reference to 1847, the year Siemens was founded – operating from offices in California, China and Germany.

Siemens already operates the Siemens Venture Capital unit under Ralf Schnell and the STB accelerator, which have so far jointly invested nearly €500m.

Siemens' investment activity since the beginning of 2016



22

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 this year 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 from last year being the flotation on the Nasdaq stock exchange of Quantenna, a high-speed wifi chip maker.

Mégret said Quantenna's $107m initial public offering in October 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."

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 last September, 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.

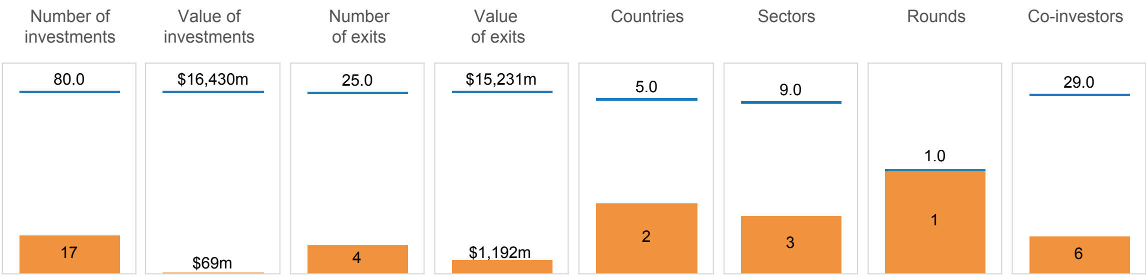
"We invest in core telecoms and IT services, in technology that will emerge in that space and transform our business within the next three years. We also invest in technologies that manage customers and improve customer experience. Then we try to discover new areas of growth which will emerge within 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.

Swisscom's investment activity since the beginning of 2016



23

Javier Placer TELEFONICA

Javier Placer took over corporate venturing and open innovation strategy at Spain-based telecoms group Telefónica in 2013, two years after joining the company.

The group is looking for significant overlap of its Telefónica Open Future innovation initiative, which runs its incubator spaces of crowdworkings, accelerator program Wayra, VC funds program Amerigo, which backs venture firms, and late-stage investment program Telefónica Ventures.

Placer has been heading all four initiatives with striking progress. At the end of last year, Telefónica had €275m ($300m) invested in 680 companies through Open Future, led by Placer's right-hand person, general manager Ana Segurado.

Segurado, a GCV Rising Star this year, joined Telefónica in 2012 to launch Amerigo, a network of VC funds with public and private co-investors focusing on tech investments, before expanding her role to the other areas under Open Future.

Amerigo now has six funds, with an aggregated size of €345m including Telefónica's commitments, in Germany, Spain, Brazil, Mexico, Peru, Colombia and Chile. It has 76 companies in its portfolio, including Job&Talent, Carto and Adjust, and its exits include Ticketbits.

Wayra, the corporate accelerator network of Telefónica Open Future with 11 spaces in 10 countries, has been its primary vehicle by volume, having invested €30m in more than 500 of these startups worldwide since its launch in 2011. In 2015, Volo, which was started at the Munich Wayra accelerator, was sold to Germany-listed Rocket Internet.

Since 2014, Segurado has also been leading Telefónica Ventures, the company's corporate venture fund with investment focus in North America, Israel and Europe. Telefónica Ventures has invested more than €60m in 19 companies, including Quantenna, Sigfox, Boku and Cyanogen, and exited others, such as Box and Amobee.

For her Rising Star profile, Segurado said: "Telefónica Open Future has achieved €100m of cumulated revenues and savings for Grupo Telefónica, coming as a result of the collaboration between Telefónica and the portfolio companies.

"Quantenna is a good case study of success in CVC. Since 2011, and with current prices of the stock after the IPO, we have multiplied by almost four times the money invested, in terms of value.

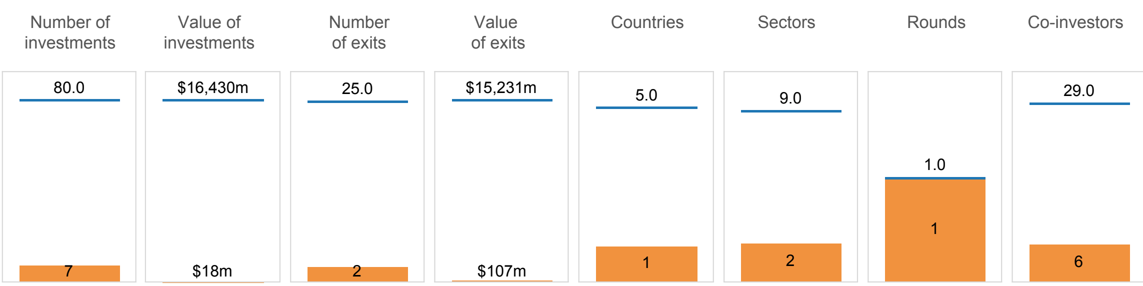
"At the same time we have a great commercial relationship between Telefónica and Quantenna. Telefónica has acquired, during this time, more than 2 million chipsets from Quantenna, and Quantenna technology has been very relevant for the deployment of Movistar TV in Spain."

For last year's Powerlist, Placer said: "These data support the strategy of Telefónica and encourage us to get the same both in the rest of Europe and Latin America, as in Asia and Africa through our partners, thus maximising the value of the current network of open innovation."

Telefónica's success is perhaps understandable given he was previously head of his own consulting mergers and acquisitions and asset management business before Telefónica as part of a 20-plus-year career in investment banking.

Placer began his career in the BBV bank in 1991, which he joined after working at Beta Capital and Salomon Brothers. He holds a MBA from New York University.

Telefónica's investment activity since the beginning of 2016



24

Vanessa Colella CITI VENTURES

At the Global Corporate Venturing & Innovation Summit in January, Scott Joachim, chairman of private equity group at Fenwick & West, welcomed Vanessa Colella, the recently-promoted chief innovation officer at financial services firm Citi who is also managing director, global head of venture investing and strategic growth initiatives at investment subsidiary Citi Ventures.

Fintech, Colella noted, was a particularly exciting space for her sector – until a few years 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 entrepeneurs who Citi can help."

She has been active in finding these entrepreneurs. Since January, Citi Ventures has co-led personal finance management app Clarity Money's $11m series B round, cryptographic software developer Dyadic's $12m B round, Tealium's series E round, and energy transaction settlement platform Aquilon Energy Services' $19m B round, among others.

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.

Colella said 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 playingfield now – and that includes firms such as Citi partnering entrepreneurs who are looking to change the game in financial services.

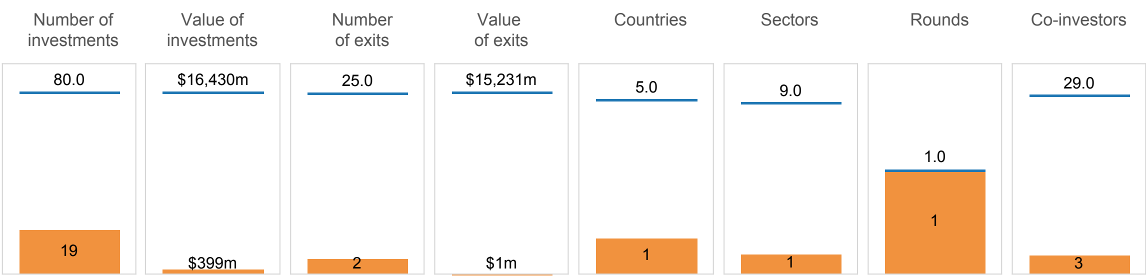
"The greatest success that we have had at Citi Ventures is our ability to figure out a method for working with our business leaders and entrepreneurs to bring together two very different kinds of minds and two very different forms of problem-solving, all with the objective of better serving our customers. 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 iAyasdi, Datameer and Platfora, security with Silver Tail 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."

Citi's investment activity since the beginning of 2016



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Jon Lauckner GENERAL MOTORS

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. "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 36 startups, and has had nine exits with an average cash-on-cash return of 1.6 times, Lauckner said. It has been the lead investor in 20 funding rounds and has a portfolio of 22 startups in the US, Europe, Israel and China.

Of its portfolio's recent deals, US-based ride hailing platform Lyft last month closed a $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. 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. "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: "Under Jon Lauckner's leadership and vision, the GM Ventures team operates with an entrepreneurial spirit, common purpose and clear direction to focus on technologies that matter most for our customers. The strategic investments being made in breakthrough technologies will accelerate GM's strategy to earn customers for life, while also helping us build the most valued automotive company."

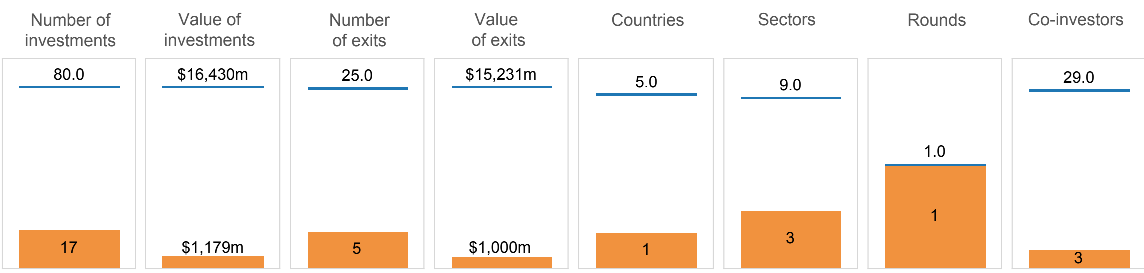
GM Ventures' simple measure of success is whether technologies in which it invests today are used in GM's vehicles of tomorrow, driving greater sales and better business results. "I am impressed by the depth and breadth of technology being developed by startups and the impact it can have on vehicles of the future and personal mobility," said Lauckner.

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.

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.

General Motors' investment activity since the beginning of 2016



Global Corporate Venturing Leadership Society

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 Leadership Society and ICVCA missions:

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.

A separate CVC trade body, the International Corporate Venture Capital Association, chaired and majority governed by practicing corporate venturers, has also been created to help the industry communicate its work to third parties, such as entrepreneurs, VCs, corporate management and through regional trade bodies and local networks that provide government lobbying.

	ICVCA (Organisation/ Individual) $499 per year	**Premium*** (Company) $12,500 per year	**Luminary** (Company) $50,000 for 2 years
Right to join and use the *'ICVCA'* 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
Executive Advisory Role - act as GCV Leadership Society Ambassador for a three-year period			✓
GCV Subscription** for up to 2 users for 12 months - access to the monthly magazine (pdf), news website and special reports	10% Discount	FREE	FREE
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ICVCA $499 per year

This US-based non-profit organisation is governed by the industry leaders in order to communicate with third parties, such as entrepreneurs, VCs and corporate managers. It is separate to Global Corporate Venturing (GCV) and its UK-based corporate parent, Mawsonia, although it can contract services from GCV and/or other service providers, such as data, to help in its outreach efforts. Subscribers to GCV will automatically be enrolled in the ICVCA with $499 rebated to the non-profit as GCV's contribution to the industry.

However, people can join the trade body separately to taking GCV's Leadership Society services.

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 ICVCA's services unless authorised by its board.

"Global Corporate Venturing represents the industry and the good citizens and leaders in the innovation capital ecosystem are part of its Leadership Society."

Claudia Fan Munce,
GCV Leadership Society Chairperson
and former Head of IBM Venture Captial

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The rest of the 100

IN ALPHABETICAL ORDER

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.

Asked why Rakuten launched its own flea market app Rakuma, which is apparently a rival of Carousell, which Rakuten Ventures has backed, Saemin told news provider Tech In Asia: "Whatever Rakuten headquarters does, we do not have control over, just as Rakuten HQ has zero influence over Rakuten Ventures. We did not know about the Rakuma thing until they announced it. That is how firewalled we are and we are very comfortable with it."

And Rakuten is more than happy with Ahn's returns and has been committing more to his team. Last year, Rakuten doubled the size of its Global Investment Fund to $200m and promptly led the $120m round for Spain-based ride-hailing app Cabify. This year's deals include MetroResidences, a Singapore-based platform matching corporate travellers to short-term rental options, which raised about $2.8m in its series A round, and ride-services company Lyft, which raised $600m in fresh funding last month.

In January 2016, Rakuten launched a ¥10bn ($85m) Rakuten Ventures Japan Fund to fund invest in startups in its home country. In November 2015, it set up a $100m fintech fund, run by managing partner Oskar Mielczarek de la Miel, with a deal last month for US-based Acorns.

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 partnership approach has worked wonders in corporate venturing. When his global fund was doubled, Ahn said: "Rakuten Ventures has been given the opportunity to work with some amazing founders who have created great products and businesses.

"With the continued progress and growth of those very leaders, we are happy to be able to dream a little bigger and push even further by partnering more core technology and service providers. We will work continuously to support invested companies and organisations in taking the next step."

Companies to have received investments so far include Singapore-based visual technology developer ViSenze, which closed a $10.5m series B round last summer.

At the time, Ahn said: "ViSenze has achieved impressive market traction with their ground-breaking artificial intelligence technology in the e-commerce space.

"With their innovation DNA, they are developing new solutions, bringing simplified shopping experiences on digital content platforms. Their new solutions for video commerce have huge potential too. We are very excited to continue investing in ViSenze and lead their series B round."

Grant Allen ABB TECHNOLOGY VENTURES

Grant Allen became head of ventures at Zurich-based industrial giant ABB at the beginning of 2017. The passing of the baton from outgoing ABB Technology Ventures (ATV) president Girish Nadkarni comes after Allen had been with ABB for more than six 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.

Bazmi Husain, chief technology officer of ABB, 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."

The strategy for ATV to accelerate and enhance ABB's corporate innovation efforts will build on past years, with the team taking a more thoughtful approach to tackling both early-stage potentially disruptive hard-tech opportunities with cheques of from $250,000 to $3m and simultaneously more strategically aligned series B and later deals with cheques of $2m to $6m. This latter category will include tight business unit alignment and investments are likely to include a memorandum of understanding (MoU), joint development agreement (JDA) or other business arrangement struck concurrently with the investment.

Allen said: "As ABB becomes an increasingly digital organisation, ATV is doubling down on enabling software and other areas that ladder up to ABB's Ability IoT (internet-of-things) analytics platform. We are seeing a large number of terrific deals in artificial intelligence and machine learning, advanced sensing, cloud and edge analytics and cybersecurity. And as the most active corporate investor in robotics – and the most active of any VC I have come across – we continue to pursue advanced industrial robotics application software. Anything that helps makes ABB's best-in-class robots safer, cheaper, more easily trainable and ultimately more valuable."

ATV will also be pursuing a fund investment strategy, seeking to expand its investor relationships beyond the current stable of three funds – ClearSky, Emerald Technology Ventures and Tsing Capital through its China Environment Fund.

"Fund investing is a terrific pathway to opening up the innovation aperture," Allen said. "Seeing more deals, and achieving maximum leverage of a team which is undersized in terms of headcount relative to its peers, though still as active in terms of deal count, is critical to us hitting both our strategic and financial goals. We are seeking close partnerships with funds demonstrating strong financial success as well as innovative and proactive modes of engaging with global companies like ABB."

In the first four months of 2017, he said ATV had already made as many new investments as in all of last year and more than the two previous years. ATV has closed investments in Enbala Power Networks (with GE, National Grid, EnerTech, Chrysalix and Ev Williams's Obvious Ventures), a developer of smart grid control software; Atom Power (with Siemens and Eaton), creator of a breakthrough solid state circuit breaker; Enervalis, maker of a smart energy management platform (with EIT InnoEnergy); and Bonsai AI, creator of a novel artificial intelligence development toolkit to "democratise artificial intelligence" (with NEA, Microsoft, Siemens and Samsung).

"Our new set-up is tighter and more nimble than ever and we are on track to double our deal close rate," Allen said of the year so far. "At the same time, we are maximising value for the ABB organisation and seeing much better dealflow as a result of this better business unit engagement, because that is exactly what startups come to ABB for – talking to that PhD expert and getting access to our brand, our R&D capabilities and our channel access.

"Currently, about one in five venture deals has a corporate participant. CVC is as mainstream, as professional, and as critical to the VC ecosystem as it ever has been. Still, the number of deals has slipped and the number of active CVC groups was down in 2016 versus 2015. The ones that remain will have to showcase even more strategic value as well as financial performance to justify their existence."

In pursuit of this, ATV will be working closely with ABB's new chief financial officer, Nokia veteran Timo Ihamuotila, to ensure robust financial governance and a path towards cashflow neutrality, meaning new ATV investments will be funded from portfolio returns.

Before ABB, Allen was a vice-president with Core Capital Partners, a $400m enterprise software-focused venture firm in Washington DC. 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, Trilliant, Grabit and Atom Power.

Marcos Almeida STEFANINI

Since 2009, Brazil-based technology company Stefanini has acquired stakes in about 17 companies with an eye on startups being dealflow for later acquisitions.

Most of these 17 stakes were controlling positions, but Stefanini has also bought minority stakes and created startups, according to Marcos Pereira de Almeida, its director of subsidiaries and affiliated companies, mergers and acquisitions and startups. Almeida said: "We act mostly as a corporate M&A than as a VC, in the sense that we do not necessarily intend to divest the companies we do business with."

Marco Stefanini, founder of the firm, has also become a limited partner in a local venture capital fund and a minority holder in an accelerator, according to Almeida.

He added: "I am responsible for overseeing eight of Stefanini´s invested companies, in some of which I have a more active and hands-on role. Since early 2016, I am also responsible for our M&A activities. So far we have announced the creation of a joint venture in cybersecurity with Israel giant Rafael and the acquisition of a controlling stake at a leading IBM reseller Scalait. I also manage our startup program, which essentially is a strategic partnership with top-tier startups and a dealflow generator for our M&A."

Before joining Stefanini, Almeida founded and ran a family office-backed seed fund and micro-VC, NH Investimentos, and worked in business and corporate development for Visa Vale and Grupo RBS, as well as consulting for Capgemini and Aquanima since the late 1990s.

Reinhard Ambros NOVARTIS VENTURE FUNDS

A dozen years ago, Reinhard Ambros became global head of Novartis Venture Funds for the Switzerland-based pharmaceutical company, when it had $175m under management. Today, it has more than $750m in committed capital and investments across North America, Europe, Israel and Asia-Pacific.

Its 36 public portfolio companies, according to its website, include UK-based anti-fungal drug developer F2G, which received $60m last year, and this month's co-lead of Vivet Therapeutics, a France-based biotechnology company at work on gene therapies for rare inherited metabolic diseases, €37.5m ($41m) A round. It has a dozen executives, including GCV Rising Star Anja Koenig.

Ambros has been on the board of Aerpio Therapeutics, Aileron Therapeutics, Forma Therapeutics, Genedata and Symetis and is also a director of the Novartis Option Fund, an innovative $200m program to support early-stage healthcare companies.

He was trained as a banker and scientist with a PhD in medicinal chemistry and pharmacology in German and a post-doctorate in the US. He said: "I found a very interesting job at Roche in Basel [Switzerland] where I was involved in a number of their development projects. At that time project management was one of the hottest jobs around. I was one of the few lucky people to see programs move to approval and discussed with the US Food and Drug Administration multiple times.

"I then moved to Novartis to manage an oncology project, but got quickly interested in business development and licensing. From there I went to the M&A group for a period working on acquisitions, before I was offered the position of head of Novartis strategic planning [in 2001]. After four years I became tired of predicting the future of pharma and wanted to be again much more hands-on with science and business."

He became managing director of the Novartis BioVenture Fund in the US.

"Overall the future of the sector is going to be stressful and evolution will take its toll on venture capital partnerships but some will do well and form a new group. I am certain we will be among them and it helps to be a leader in this field."

Kemal Anbarci and Barbara Burger CHEVRON

No sector has been roiled as much by economic and political turbulence over the past few years than the oil and gas industry.

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 to about $50 a barrel this year just as Saudi Arabia is seeking to privatise its $2 trillion state oil company, Aramco.

Anbarci, who last year 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."

For this year's Powerlist, Anbarci said his achievements over the past year had included "keeping more than 30 startups alive through downturn with tools available to us, including follow-on investments, field trials and sales contracts, making two new investments, and hiring three new venture executives and one new venture analyst".

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.

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. The most recent deal was the $36m round for MemSQL, a US-based real-time data analytics provider.

Askew said for last year'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."

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.

Roy Bahat BLOOMBERG BETA

Roy Bahat, head of Bloomberg Beta, said when it closed its second $75m fund in July: "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 "obessed with how we make work – the thing we do with more waking hours than any other – better".

In February, US-based office space provider Knotel raised $25m in a series A round that included e-commerce holding group Rocket Internet and Bloomberg Beta. Invest AG, the investment arm of financial services firm Raiffeisen's Austrian bank group, also participated, as did venture capital firm 500 Startups and assorted angel investors.

Founded in 2015, Knotel operates a network of customised offices that companies can lease as their headquarters without long-term commitment. Knotel does not own the majority of these offices but connects tenants with landlords through a managed marketplace. The network spans 10 locations in New York but the series A capital will enable the addition of another 40 spaces over the next year.

Bahat said at the time: "Fast-growing companies need an entirely new kind of workplace experience than plain offices provide. Knotel can offer that new workplace experience, for that new kind of company. There is a clear opportunity to build a grand-scale business on Knotel's platform."

Bloomberg's other recent deals include Sapho, a US-based micro enterprise app development platform for older software, which raised $14m in its series B round.

He said for last year'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 last year, 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.

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.

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.

He said: "We have just completed a terrific eighth year for BlueCross BlueShield Venture Partners. During the year we completed a very successful raise of a 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.

"Initial investments for the new fund included Exactcare, a market-leading home-delivery pharmacy that deploys clinicians to the home to help polychronic [multiple chronic disease] and at-risk patients manage complex medication regimens, and Payfone, the dominant mobile-focused identity credentialing and data management platform [which raised $23.5m].

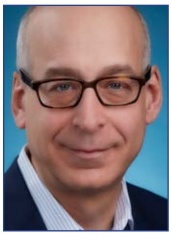
"With the healthcare industry continuing to experience unprecedented change, we will continue to focus on supporting leading entrepreneurs driving innovation within a dynamic marketplace."

It is success supported from the very top. Scott Serota, president and chief executive of the Blue Cross Blue Shield Association, 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.



Kenneth 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.

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 last year'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."

Bronfin has also backed and joined the boards of Roku and Stylus Media, two of its 25 current investments, which this year have included mobile platform Zinc, virtual reality company 8i and streaming company Caavo.

He remains on the board of games maker Hasbro but stepped down in 2015 from the boards of Yieldex, after AppNexus bought it for $100m, and Cognitive Networks, after Vizio's acquisition.

Other direct portfolio companies have been more challenging. Germany-based auction house Auctionata, which Bronfin had backed, filed for insolvency in January and spun off Paddle8, with which it had merged in May last year.

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. Bronfin said: "Our most important highlight [last year] was the opening of our 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 – 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.

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. Early last year, 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, 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 said examples of investments made under this revised strategy included Morphic Therapeutics, targeting the first oral integrin therapies for a range of diseases and which raised $51.5m in its series A round; Palleon Pharmaceuticals, pioneering the discovery of cancer therapies related to the glyco-immunosuppression axis and which revealed in a regulatory filing it had raised $8.6m and also had Jens Eckstein, head of GlaxoSmithKline's SR One corporate venturing unit, as a director; and Artios Pharma, developing breakthrough cancer therapies targeting DNA damage-response pathways and which raised $33m in September's A round. Other recent deals include Aquinnah Pharmaceuticals' $10m to develop neurodegenerative disease drugs.

Through these investments, AbbVie said it had strengthened relationships with top-tier institutional and corporate venturing firms via co-participation on portfolio company boards.

AbbVie Ventures said this 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 last year.

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.

Roel Bulthuis MERCK VENTURES

Roel Bulthuis, senior vice-president and managing director of Merck Ventures, the corporate venturing unit of Germany-based Merck, is preparing for his workload to increase again this year with at least a dozen new deals.

Bulthuis set up what was then called MS Ventures in 2009 and last year 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.

Stefan Oschmann, chairman of the executive board and CEO of Merck, said: "As a leading science and technology company, innovation is vital for Merck. This is why in 2016 we expanded our existing biopharma venture fund to the total funding volume of €300m and to all our three business sectors – healthcare, life sciences and performance materials. And we added a fourth investment arm representing all businesses beyond our current portfolio. We consider Merck Ventures a key tool to access external innovation. Roel has been instrumental in building the fund and is the driving force behind it."

Bulthuis, who reports directly to Oschmann, said he expected this year to make three to four new investments in each of healthcare, life sciences, performance materials and new business as well as working on three potential new Merck spinoffs.

In January, it invested in Medisafe's $14.5m B round, its second investment in digital health, with its first investments in both the life sciences technologies and performance materials to be disclosed in the second quarter of this year.

This compares with four new investments during last year in Artios Therapeutics, where Merck was co-lead in the $33m A round, Artsavit, a company created in Merck's Israel incubator and where the $6.3m A round was announced at the start of this year, Akili Interactive Labs' $11.9m extension and iOmx's $45m A round.

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 Merck 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."

He added that, last year, "our portfolio of spinoffs that we created from Merck started to mature with major financing rounds for Asceneuron (Sfr32m ($32m) led by Sofinnova), Prexton (€30m led by Forbion) and ObsEva (raised [$97m] in a Nasdaq IPO)".

Its other portfolio companies had similar successes with more than €260m in follow-on rounds and the sale in March 2016 of Padlock Therapeutics to New York-listed drugs company Bristol-Myers Squibb for up to $600m, including an initial $225m.

Padlock raised about $18m since inception in 2013-14 by venture capital firm Atlas Ventures and academics Paul Thompson and Kerri Mowen from a consortium including a series A round with Johnson & Johnson and Merck Ventures, later adding Index Ventures and GlaxoSmithKline.

Merck's ventures team doubled from seven to 14 in the first quarter of 2016 and is expected to increase again this year, he added, and Bulthuis shifted his line management to report directly to Oschmann, who took over from Karl-Ludwig Kley.

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.

Tony Cannestra DENSO

In 2014, Tony Cannestra, previously of Strategic Venture Partners and Ignite Group, took on a new role as director of corporate ventures at US-based automobile parts manufacturer Denso.

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. He said: "In my three and a half years as the leader of the CVC group at Denso, the company has made five direct investments in startup companies, [including most recently Peloton Technology's $60m series B round], two direct investments in VC partnerships, and three ongoing sponsorship agreements with incubators or accelerators.

"Since mid January of this year, I have completed two follow-on investments to our existing portfolio companies, and I have received approval to close five new investments, in four of which we are the lead investor, so I had to negotiate the term sheets.

"[Last month] I was asked to help lead a team to engage in a significant acquisition opportunity."

In an interview for GCV's mobility sector report published in January, 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 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.

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.

Gilligan said: "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 who got the proposition we were talking about, which was quite a challenging proposition to pitch to him 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 last August that Gilligan and Cant said was 99% funded by the bank. It has already made four new investments, including Doshii, Fillr and Hyper Anna.

For both 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.

Darren Carroll ELI LILLY

Darren Carroll is now senior vice-president of corporate business development at Eli Lilly after promotion in 2015, but he retains control of the global corporate venturing program he founded in 2005.

Lilly Ventures and Asia-focused peer Lilly Asian Ventures developed out of Carroll's earlier work on the open innovation market in physical sciences through spinning out InnoCentive from the company.

Carroll was promoted to vice-president of corporate business development in 2010, having originally joined Eli Lilly as an attorney in 1996.

In his latest role, Carroll is in charge of all strategic corporate venturing efforts including mergers and acquisitions, joint ventures, business collaborations, private equity investments and out-partnering. He reports to Derica Rice, the company's executive vice-president of global services and chief financial officer.

At the time of his promotion, Carroll said: "The companies that are most effective at external innovation leverage a strong internal innovation capability. Our long-term commitment to scientific excellence at Lilly is the foundation for success in identifying, accessing and shaping external innovation. It has been recognised by partners that range from startups to other top-10 pharmaceutical companies, and it is a critical reason why we are attractive as a partner – we are all in on innovation."

Lilly also has a capital funds strategy, which Carroll, in his LinkedIn profile, said had yielded two VC funds independently managed by HealthCare Ventures and TVM with more than 10 new companies working toward clinical proof of concept, plus the acquisition of Artaeus from Atlas Ventures.

US-based Lilly Ventures was set up first with $200m. It has 16 active portfolio companies on its website, and is led by a team run by Edward Torres, co-founder and managing director. Its recent hits include the flotation of Zymeworks, a cancer-focused antibody developer in which Lilly held a 17.5% stake, in a $58.5m initial public offering.

The Asian team, however, has grown quickest since its start in 2008 with $100m, as it now has 30 portfolio companies on its website, including US deals it has backed.

The Asian team is headed by managing partner and star investor Fei Chen, with his colleague Judith Li named a GCV Rising Star in 2016 and 2017. Last year's Lilly Asian Ventures deals included four in the US:

- US-based Nextcure, which focuses on the development of next-generation immuno-oncology therapeutics using a proprietary platform developed at Prof Lieping Chen's laboratory at Yale University.
- TMunity, which spun out from University of Pennsylvania last January to focus on the immunological potential of T-cells to treat a wide range of diseases.
- Fortis, a California-based early-stage biotech whose lead asset is an antibody-drug conjugate for the treatment of prostate cancer and multiple myeloma and which raised $18m in September.
- Singlera Genomics, a US-based developer of genetic testing technology that raised a $20m series A round.

It is a platform built by Carroll to help its parent remain a "top-10 innovation-based pharmaceutical company".

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.

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, 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.

As well as the Korea fund, Applied Ventures is opening an office in Singapore to identify opportunities across the region.

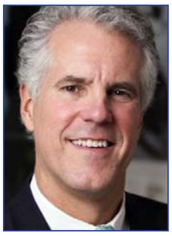
The unit, which invests up to $50m a year, is particularly keen on collaborating with other investors in Asia.

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.

This was part of the $200m the unit had invested in 60 equipment and component manufacturers around the world until the end of 2015, with almost a handful of deals announced since, including Norsk Titanium, Inpria and SolidEnergy. More recent deals include augmented reality technology developer Avegant, which added $13.7m from backers including Intel Capital and Applied 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 masters in electrical engineering and computer science from Massachusetts Institute of Technology gave him a premier education he has translated into a material career.



Christopher Coburn PARTNERS HEALTHCARE

Christopher Coburn, newly promoted as chief innovation officer at Partners Healthcare, is in charge of the venturing team at the largest academic research enterprise in the US.

Partners Healthcare's core hospitals are the Brigham and Women's Hospital and the Massachusetts General Hospital (MGH), while faculty are appointed at Harvard Medical School.

Each of the companies in its portfolio is built around a technology developed by Partners' Harvard-appointed faculty at its core hospitals, including a pending "nine-digit deal with a global concern to be announced in the next couple of weeks". Such successes mean Partners' latest fund should close "at about $165m", Coburn said, with another "$100m external fund principally focused on one unit at MGH".

As chief innovation officer, Coburn is joining up the team and said he would be taking over and integrating Partners' "international consulting arm into our core operations" and moving into a new headquarters in Boston.

Coburn previously worked as executive director of US-based Cleveland Clinic Innovations (CCI). Coburn founded the unit, which now has a team of 70, to commercialise the institute's $300m annual research budget through licensing and spinoffs.

From its inception in 2000 to Coburn's departure, CCI's 55 spinoffs raised nearly $700m. He also pioneered CCI's national Innovation Alliance, through which the clinic manages innovation for providers throughout the US.

Prior to his arrival at CCI, Coburn was a vice-president at Battelle Memorial Institute, a non-profit research institute in Ohio, US. Coburn was also Ohio's first science and technology adviser to the state governor, advising on all matters of technology, science and related economic strategy.

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. In this role he looks after early-stage technology scouting and corporate venturing for Schlumberger Worldwide and a decade later his persistence and ability in venturing has paid off with the company committing to a larger initiative.

Imran Kizilbash, vice-president of the expanded Schlumberger Venture Fund, 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."

Cooper added: "In terms of achievements we had a nice exit with Liquid Robotics – with a pretty good multiple – 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, Alphabet Energy and GHGSat."

GHGSat, a Canada-based company that operates the world's first satellite capable of detecting and measuring methane emissions, was in September named the winner of the third annual Oil and Gas Cleantech Challenge hosted by the Colorado Cleantech Industries Association. Its venture round is undisclosed.

Cooper said: "We also commercially deployed in the field in multiple locations brand new technology – sorry, I cannot disclose which – that can revolutionise production from oil and gas wells from an investment we made only two years ago.

"Plans for the year ahead are to grow the team a little larger, continuing the focus on the alternative energy space, while still supporting the core Schlumberger businesses and supporting our new Menlo Park software innovation technology centre."

In 2015, he recruited Jake Latcham from OneSubsea, a subsea oil production company jointly owned by Schlumberger and oil and gas company Cameron. The hire took Cooper's team to three people, with Latcham joining Christina Karapataki, a GCV Rising Star, who was added to the team in 2012. Further internal moves to add to Schlumberger Venture Fund this year include Kizilbash and another from mergers and acquisitions.

Latcham is an Massachusetts Institute of Technology graduate like Karapataki, who has deployed $9m in 10 financings of companies, including Nantero, Onapsis, 908 Devices and Naturafrac, reflecting Cooper's desire to have a team of technical experts. For last year's Powerlist, he said: "I have always thought the financial stuff is the easier side. I always like to pick people with domain expertise and leverage our group by looking at tech, which is much more fun."

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 nearly 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, Bill Burkoth, was named a GCV Rising Star last year.

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.

Pfizer had been an earlier backer of Epic Sciences, a cancer diagnostics specialist that has just added $40m in its D round, while Pfizer and AbbVie have added $10m to develop Aquinnah Pharmaceuticals' neurodegenerative disease drugs.

Dalton has a PhD in microbiology and immunology from Medical College of Pennsylvania.

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 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. Deals included Cylance, Docusign, Exablox, Invincea, Lastline, Mirantis, Nexenta and Nutanix. In February, Sophos agreed to acquire Invincea, an anti-malware software developer that had raised about $39m, for $100m in cash plus a $20m earnout.

Under Darling, Dell Technologies Capital is likely to increase 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.

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 EMV 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.

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.

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 was a "great year", he said.

In 2016, TVC made four strategic investments, including one follow-up, with disclosed deals such as Nantero in the US and Tsukuba-Seiko in Japan.

Enjoji manages a team of 13 in the US, Japan, France and Israel making strategic investments for TEL. Its 22 investments, such as Alberta Nano-Monitoring Systems, Particle-Monitoring Technologies and OPT Creation, cover a range of innovative technologies from those impacting TEL's 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, and as well as its four deals, Enjoji said two new products were also released.

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.

Beth Ferreira WME VENTURES

Wisdom comes from experience, which is often earned as much through challenges as successes.

Beth Ferreira, managing partner of WME Ventures, the investment unit of WME IMG, understands the entrepreneurial perspective from both sides, having previously been chief operating officer of fashion startup Fab.

Fab was sold in early 2015 for what news provider TechCrunch reported as a "fire-sale price" of $15m, compared with the approximate $300m it had raised at a $1bn valuation.

Ferreira had left a year before Fab's acquisition by PCH International in February 2014.

During her time at Fab, she was a venture partner at Firstmark Capital, a VC firm co-founded by Amish Jani, an alumnus of University of Pennsylvania's Wharton School who had finished his MBA there two years before Ferreira.

WME Ventures is her first corporate venturing role after former financial and operational experiences at investment banks UBS and JPMorgan.

After leaving JPMorgan in 2002, she spent three years at management consultancy Boston Consulting Group and then the same amount of time at crafts site Etsy.

WME Ventures was set up in July 2015 using money from the talent agency as well as third parties. In November last year, the fund closed officially at $50m, structured as a separate institutional fund.

Ferreira said its deals last year were Ollie, Gusto, Viyet and Daily Harvest, while its existing portfolio made progress, including Hooked which has had 10 million teenagers reading fiction on their phones.

She said with WME Ventures having invested in the series A and A1, Glossier was "doing well and successfully raised a large series B".

She added: "We work closely with the company on marketing strategy and influencer marketing."

Masterclass closed a $35m C round led by VC firm IVP in March and Ferreira said: "We work very closely with the company and many of our clients have created classes, including Aaron Sorkin, Serena Williams."

She said for her GCV Rising Star 2016 award she was looking forward to educating the technology and VC community about the new fund and WME's new approach to venture investing and hoped the industry could become stronger through "more sharing and collaboration".

Mel Gaceta SYNCHRONY FINANCIAL

Mel Gaceta had a clear mandate when he joined US-listed Synchrony Financial last June after running US phone operator US Cellular's strategic partnerships and business development team.

He was to "identify, execute, and manage Synchrony Financial's strategic minority equity investments" under Michael Hensinger, senior vice-president and senior managing director.

With more than 16 years in corporate venture capital investing this was something Gaceta, a former GCV Rising Star, has had plenty of experience in and was a natural recruit for Synchrony, which floated after spinning out from General Electric's consumer finance operation in 2014.

As well as training two new team members, Kevin Weber and Kelly Shaw, hired into the team in the final quarter of last year, Gaceta has been active on deals. He said he "took over management of investments made before the practice was established, [including GPShopper,] as well as closed three new deals in 2016".

These deals in the second half of last year included payment card management platform First Performance's $17.5m round and an undisclosed amount in FlexReceipts, a provider of digital receipts.

Synchrony 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. The companies collaborated on several mobile offerings, including the Synchrony Plug-in, or SyPi, a native credit feature that plugs into a retailer's mobile app.

Another of its former portfolio companies, LoopPay, a mobile payment platform, which Synchrony backed in July 2014, was acquired by Samsung and integrated into Samsung Pay in 2015.

Gaceta added: "For 2017, we will continue to refine the investment process and portfolio management capabilities, such as deal-tracking, reporting and due diligence. Additionally, we will continue to refine our investment focus areas, so we can be efficient in our pursuit of strategic investments. Last, we expect to ramp up pitches to our investment committee."

Much of his experience came from 13-plus years in the corporate venture community at Motorola Ventures before joining US Cellular at the end of 2013.

He had joined telecoms equipment company Motorola's ventures unit at its inauguration in November 2000 as director of finance, managing all aspects of accounting and finance for its then $200m-plus strategic investment portfolio.

In late 2004, he became an investment manager at what went on to be Motorola Solutions Venture Capital after the split of the parent. His deals at Motorola included Lumidigm, Siimpel, Invidi Technologies, AirClic, Zephyr Technology, MicroPower Tech and Canvas.

Srinivas Gattamneni AXIATA

Four 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 12 direct investments in its first three years and another 10 last year.

Axiata also closed direct investments in two international companies last year – StoreKing in India and Bima, an emerging markets insurance business headquartered in Sweden. Axiata Digital invested $16.8m in strategic partner Bima, adding to a series C round that already included telecoms companies Millicom and Digicel.

Overall, these deals cover commerce, payments, entertainment and advertising. Gattamneni said: "Our direct investments have progressed well, with three of our investments having received follow-on funding [or acquisition] from other strategic investors and CVCs – Adknowledge Asia, the largest adtech firm in Southeast Asia, FreedomPop, which had a [$50m] follow-on round from LetterOne, and Twig, which exited to Australian business Unlockd [an undisclosed deal]."

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.

Gattamneni said: "On the success of the Malaysia fund, we have launched two additional funds this [past] year 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

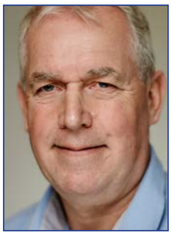
Lana Ghanem has been managing director of Hikma Ventures since August 2015 having officially joined the Lebanon-based generic drugs company three years earlier within the office of the CEO covering corporate strategy and development. She was a summer associate in 2011 while completing her MBA from Harvard.

Going from that to "establishing Hikma Ventures has been an eye-opening experience with a steep learning curve", she said.

"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 hiring Hamzeh Abdul-Hadi, a GCV Rising Star, as an associate, and making two investments in US-based companies, Chrono Therapeutics and Propeller Health.

She is a board observer at both portfolio companies, but looking for more deals, and has been working on "building Hikma Ventures' reputation" through connections with more than 120 venture capital firms globally.



David Gilmour BP

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 of business development in group technology at BP and has developed what he calls "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.

The larger capital allocation means BP Ventures can now do bigger deals, such as its 2016 $30m investment in Fulcrum Bioenergy, a US business that converts waste to renewable aviation fuel, and in which Air BP was also an investor. It can also expand its team, resources and number of deals. Six investments were made last year, with others including Rocketroute (digital flight planning), Biosynthetic Technologies (biolubricant base oil), and Drover (ride-sharing). There were eight technology deployments – new projects involving a BP business unit deploying technology from the venture portfolio.

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

Since December, when BP Ventures invested in BiSN Oil Tools, a developer of oil production products based in the UK and the US, there have been three deployments of its technology within BP in as many months. "They are struggling to keep up with our demand," said Gilmour.

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."

Katherine Grass AMADEUS IT GROUP

Katherine Grass, head of innovation and ventures for Amadeus, joined the travel reservations company in 2006 after founding Chalktech and completing her MBA at Edinburgh University.

Managing a team of more than 15 across the company's three innovation units has given Grass a perspective on how to join up the insights to aid the parent company.

She said: "One interesting angle for us has been how we have developed a strategy around innovation coupled with the lessons from ventures. Ventures for us as a corporation was the first vehicle for innovation.

"What we learned quickly is that startups were asking for many other things in terms of collaboration and we needed to come up with a portfolio offering of programs to serve their needs. And we did not think this was the typical accelerator approach. Therefore, we have been developing a concept of funding – expertise, reach, technology – to meet all those needs.

"The second program we are launching to complement ventures is an open application program interface (API) [Amadeus for Developers, which] addresses the development community as well as on startups, something our traditional API could not do at Amadeus.

"And now we are launching innovation partnerships to help startups with customer reach with our global network of customers – a customer club, if you will, of forward-thinking customers that want to be connected into the startup world. Our external programs are going to be very complete, and we are just looking at branding and launching this with better communications.

"The other huge shift is now connecting internal innovation ideas to these external programs. Amadeus, like many corporates, has the problem of whether to innovate externally or internally, and there is a bit of competition between those two sides.

"We have now integrated this into one team so the external team under me actually plays a stronger role in how to fund these internal investments and we want to see a portfolio approach to any strategic theme.

"For example, if we have a strategic interest in blockchain, we look at it now holistically to see where we invest via ventures, where we forge partnerships and where we fund internal investment, so it all synchs and makes sense at a corporate strategy level."

This approach can be seen in its deal-making. Grass pointed to Retterez, a technology to connect bus and air networks, and predictive analytics company Flyr's investment and follow-on round. Flyr predicts how fares for any flight are likely to behave and calculates the cost of underwriting the financial risk.

Already, Amadeus has seen some successes with the sale of chatbox provider Evature to Priceline, and a secondary sale of its holding in Cabify before its last $120m funding round with Rakutan Ventures.

Phil Graves PATAGONIA

After launching originally as US-based clothing company Patagonia's corporate impact venturing fund $20m and Change in 2013, Phil Graves, director of corporate development, changed the fund's name to Tin Shed Ventures.

He said: "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, 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.

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.

This year, Graves said additional funding rounds could be required for existing portfolio companies, such as Bureo and NuMat, which are growing and require capital for expansion into new verticals, and Tin Shed Ventures was "exploring investment opportunities to promote regenerative organic agriculture practices, such as using cover crops, rotational grazing, and eliminating tillage".

And he is encouraging portfolio companies to work together. He said: "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 CO2 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.

John Hamer MONSANTO

John Hamer took charge of agriculture business Monsanto's corporate venturing unit within Monsanto Growth Ventures at the end of 2012.

This was a year after Stephen Padgette assumed his current role in Monsanto's global strategy group as vice-president for R&D investment strategies, including corporate venturing and biological business startups.

And, ahead of its own $66bn sale to chemical and pharmaceutical company Bayer, crop company Monsanto's first corporate venturing exit is useful.

In November, Climate Corporation, a Monsanto subsidiary, acquired Monsanto Growth Ventures portfolio company VitalFields, an Estonia-based developer of a digital tool available in seven European countries that collects field data to help farmers plan, manage and analyse their work to improve productivity. Hamer said this exit was "an important one in validating our strategy".

Founded in 2011 and previously known as WeatherMe, VitalFields was revealed as a portfolio company of Monsanto Growth Ventures in January last year. It raised $1.2m in a May 2015 round backed by SmartCap, part of the state-backed Estonian Development Fund.

By the end of last year, the investment team had amassed 13 portfolio companies, achieved one exit, and deployed more than $100m in committed capital in just under four years. Its more recent deals include online grain-trading platform FarmLead, which closed a Monsanto Growth Ventures-led round in March to support its expansion from Canada to the US.

But Monsanto Growth Ventures has had bigger wins, as the group has helped contribute more than $10bn of value to Monsanto through the development of its data science group around Climate Corp, an acquisition Hamer brought to the company after a recommendation by corporate venturing peer Jacqueline LeSage Krause, now head of Munich Re/HSB Ventures.

Before he was investment director at Monsanto, Hamer was a managing director at Burrill & Co for nine years and was chief executive of Arete Therapeutics and Paradigm Genetics. He was a professor of biological sciences at Purdue University and a visiting scientist at DuPont. He has a PhD in microbiology from University of California Davis, and studied biology and biological sciences at University of Windsor.

Zhiqiang (George) He LENOVO

Lenovo, a Hong Kong-listed $46bn global Fortune 500 company best known for its personal computers, has developed an "investment cluster" concept consisting of four venture subsidiaries – Lenovo Capital and Incubator Group (LCIG), venture focused Legend Star and Legend Capital, and private equity firm Hony Capital.

The newest is LCIG, which was formed a year ago to invest in core technology and internet-related areas globally and pull together some existing investments and internal startups.

Zhiqiang (George) He, Lenovo's senior vice-president and chief technology officer, is president of LCIG and plans to invest $500m in cloud computing, big data, artificial intelligence, robotics and internet service projects through the Lenovo Capital Phase II Investment Fund. He reports to Yuanqing Yang, Lenovo chairman and CEO – both launched LCIG last May.

LCIG internal subsidiaries at launch included ShareIt, Lenovo Cloud, Lenovo Connect, Online Biometric Authentication, Lenovo Finance, Lenovo Smart Healthcare, and Lenovo New Glass, as well as more than 40 investments, including iDreamSky, Face Plus Plus, StyleWe, Shopex, Zaker, Diting Technology, and SmartX. Lenovo Capital has also invested outside China in Nok Nok Labs in the US and VC CPI in Israel. Its recent deals include joining the latest $87m round for the smart electric vehicle developer Nio, formerly NextEV.

He said at the launch: "We are well-prepared to shape the future of game-changing technologies through funding and nurturing startups and bringing incubator projects to market."

Lenovo Capital supplies startups a variety of resources, including access to a global R&D structure with approximately 10,000 engineers, supply chain management, help with administrative support functions and customer procurement.

Lenovo also created the Lenovo Accelerator at Hong Kong Cyberport to serve global technology entrepreneurs in the early stages, and focuses on core technology and technology, media and telecoms. It targets startups specialising in core technologies.

The other parts of the investment cluster have also been busy. Wei Liu, the head of Legend Star, which has initiated more than 100 projects, joined Baidu Ventures, and Legend Capital's managing director Erhai Liu left in 2015 to form VC firm Joy, leaving Wenji Jin as MD.

However, Legend Capital, the venture capital firm formed and sponsored by China-based conglomerate Legend Holdings, raised $243m for its latest fund, according to a regulatory filing. LC Fund VII raised the capital from a total of 23 limited partners according to the filing, and is targeting a final close of $375m. Legend Capital began raising money for the fund in February last year.

Legend Capital has invested in more than 300 companies and exited about 90 through public listings and acquisitions since its foundation. The firm has more than RMB30bn ($4.35bn) of assets under management. Portfolio companies currently include car servicing platform Tuhu, cloud infrastructure provider UCloud and pharmaceutical company Innovent Biologics. Recent exits include chauffeured car service provider UCar, which went public in China in July 2016 at a $5.5bn valuation.

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 this year, 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 Blackstone Group. She said: "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.

"Under my leadership, Simon Ventures is now pursuing a risk-adjusted approach to venture capital investing that is unique for the industry and especially well suited for companies innovating in the next-generation commerce and retail tech space given their unique growth, capitalisation needs and exit profiles," she said.

The role of financial returns and potential is, undoubtedly, pivotal for Simon Ventures. "Our investments will exhibit common characteristics that are fundamental to our investment, risk management and portfolio construction philosophy, demonstrating extreme capital efficiency in their ability to achieve profitability, coupled with rapid scale."

Hwang has backed five companies at Simon Ventures from the retail and e-commerce space that represent her investment strategy – Grailed, a curated community marketplace for men's clothing, Dirty Lemon Beverages, a next-generation beverage platform, Appear Here, a platform described as the "Airbnb of retail real estate", MeUndies, an e-commerce underwear company, and multimedia agency FabFitFun.

With enviable experience under her belt in companies from these fields, she said she understood their unique needs, which often differed from traditional tech companies funded by VCs. She said she was also aware that, as a corporate venturing investor, Simon's unit had to provide additional value to portfolio companies.

She added: "We are also building a highly strategic platform that offers companies access to the best across assets in real estate, brands, technology, capital partners and proprietary social networks to impact their growth trajectory. All the services we provide can be considered a form of dilutive capital that comes at no additional cost to founders' equity and do not require a trade-off in terms of incentive alignment."

Rather than a challenge, she sees this as a differentiating factor, which could help enhance the image of corporate venturers among startup and entrepreneurial communities.

"I believe that good investors will ultimately be recognised for their insights and for the value they bring. Increasingly, the best entrepreneurs are looking for investors that can provide them value-added resources and industry specific insights that will give them a competitive market advantage."

That is why, looking ahead, Hwang is optimistic that such relationships between corporate venturers and emerging retail and commerce companies will change the image of CVCs. "As corporate venture capital activity becomes increasingly widespread and as new hybrid models and fund structures increase to challenge the notion of how a CVC typically operates, traditional viewpoints will evolve to reflect the realities of this dynamically evolving industry, which carries with it the potential for tremendous impact. Simon Ventures for instance, is financial-return-oriented and operates a model that is unique for this space."

Mary Kay James TYSON FOODS

Mary Kay James, a managing director at DuPont Ventures, the corporate venturing unit of the chemicals company undergoing a complex merger with peer Dow Chemical, and one of the unit's founding members in 2003, last year announced her move to US-based meat processor Tyson Foods to run its new $150m fund.

Tyson New Ventures will invest in alternative proteins, food security and using the internet in the food chain. Its first deal was acquiriing 5% of Beyond Meat, which has created a plant-based protein, in October.

James, a GCV Rising Star in 2016 and 2017, said as well as securing three or four people for the deal team, she would be setting up an incubator to connect with companies as potential acquisitions.

At DuPont Ventures, James had responsibility for sourcing, analysing and executing strategic investments for its $15bn agriculture and nutrition businesses. She was promoted in 2013 to MD for agriculture, nutrition and health investments after more than nine years of investing in energy storage and solar investments. She also has experience as an adviser to cleantech VC American River Ventures. She is currently a board observer at AvidBiotics, an anti-bacterial company.

In 2015, James finished her tenure as chairman of the corporate venture group of US trade body the National Venture Capital Association (NVCA). Her work at the NVCA and other organisations has encouraged James, a post-graduate in mechanical engineering from Ohio State University, in her view that collaboration and discussions more broadly are worthwhile.

She said: "At a high level, CVCs have done a great job participating in and supporting industry groups. But building trusting relationships is what drives investing partnerships, so more work can be done on that side. Non-competing companies should make it a priority to develop co-investing relationships with other CVCs as well as do a better job at finding common areas to share investments."

Lev Khasis and Victor Orlovski SBERBANK

Efficiency is not always a given among big banks, but Russia's largest, Sberbank, prizes it highly as part of its transition from command-and-control to customer-led service provider.

Herman Gref, Sberbank's CEO, said: "We are leveraging data and our deep relationship with the customers to build a platform-like business predicting what our customers need in the next moment and enabling our customers to access products and services instantly on demand. Efficient engagement in the startup ecosystem [through] VC activities in large part accountable for our success"

The relationship between Victor Orlovski, chief technology officer and chief digital officer in Sberbank for eight years and now managing partner of the MoneyTime venture firm managing the bank's fund commitments, and Lev Khasis, first deputy chairman and chief operating officer, has been crucial.

Orlovski said, for his GCV Rising Star profile in January, that through the Sberbank Tech Venture Funds (SBT) he was helping the bank invest in ventures that can leverage the Sberbank infrastructure of 110 million consumers, 2 million merchants, 80 million mobile banking users and "outstanding brand and customer's loyalty in more than 20 geographies".

Khasis said Sberbank's commitment was $90m for SBT Fund I, out of a total fund commitment of $100m, and $50m for SBT Fund II, out of a $200m total from more than 50 limited partners. Orlovski said the second fund was closing. By the end of last year, Moneytime had invested in 14 deals, including Israel-based social investment platform EToro, US-based mortgage provider LendingHome, cybersecurity provider Tufin and in-memory processing grid technology provider GridGain, Orlovski said, adding that many of them had started a commercial relationship with Sberbank in the form of contractual arrangement, profit-sharing and joint ventures.

He said: "Sberbank's goal is to become more than a bank, targeting many industries and markets that are not financial by nature by exploring the Alibaba and Tencent model.

"Sberbank aims to leverage technology and know-how, business models and so on, having built the ecosystem with startups we are investing in. The fund is not an affiliate of Sberbank and therefore has a freedom to invest globally and under the fund's mandate and investment thesis. The fund is not a fintech fund by nature but is an investor in promising technology and business models that may be synergistic for Sberbank."

Khasis, who is on the boards of LendingHome, Boxed and Evotor, added that Sberbank's business model had already moved from a traditional banking landscape to a "platform-based business in which we leverage our relationship with customers in the financial space and deep understanding of data around our customers".

In February, Sberbank announced an artificial intelligence-developed recommendations platform via a new personal assistant service in Sberbank Online.

Khasis said: "We completely rebuilt out technology, business processes and customer relationship models. We are becoming a true data company, analysing every bit of data associated with our customers. We work on productive models and algorithms and are now able to make real-time decisions, customised offers and respond to the changing behaviour of our individual customers.

"We built a platform capable of integrating different business strategies across different customer needs, be it a private individual or a corporate. Our platform allows effective connection of third-party services, creating a store-like marketplace, and our data allows each service to be offered in a special and dedicated manner predicting customer needs.

"We are developing our presence in sharing and on-demand economy, partnering leaders in such industries as on-demand transportation, business-to-consumer market places, healthcare, cloud, telecoms and a few others."

The reference to a "store-like" experience reflects Khasis's previous retail background before joining Sberbank as Gref's right-hand person in September 2013.

Khasis was CEO of X5 Retail Group before joining US-based retailer Walmart as senior vice-president. A source close to Khasis said it had been expected Walmart would make a large acquisition in Russia, but he returned instead to banking.

Having initially graduated in aerospace engineering just before the collapse of the Soviet Union. He retrained in finance in 1995 and worked in banking at Alfa. He became chairman of trading company Perekrestok before his switch to retail.

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. Koertge said: "Telstra Ventures continues to make solid progress. We have recently closed our 38th investment since we started five years ago. We have now achieved seven liquidity events, and we have expanded our team to 20."

At the end of last year, 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.

Its most recent public exit was BICS's acquisition of TeleSign in a $230m cash deal. Telstra had invested $9m in TeleSign as part of a $49m series B round in 2014, which came after $29m of funding two years earlier. Its recent portfolio company deals include HealthEngine, an online healthcare marketplace, which motored to a $20m series C round.

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.

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.

Sungjong Lee SAMSUNG VENTURE INVESTMENT

Sungjong Lee has been in charge of Samsung Venture Investment Corporation (SVIC), the corporate venturing unit of the South Korea-based conglomerate, as president since 2013, although there has been a distribution in investment oversight of the regions.

Formerly SVIC's vice-president, Lee succeeded Woi Hong Choi, who was president from 2009 until late 2013. Lee was promoted to president at the same time as seven other new presidents were appointed within the South Korean conglomerate.

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

However, as one insider said: "While president Young Sohn is involved in many investments, Sungjong Lee is still head of SVIC and has final approval of a larger number of official 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. Its most recent deals include Bonsai, a US-based platform that helps businesses build their own artificial intelligence models, which raised $7.6m from a multi-corporate consortium involving Microsoft Ventures, Siemens and ABB Technology Ventures as well as Samsung.

Lee has a bachelor's degree from Kyungpook National University, while Sohn was a former CEO at Inphi, Agilent Semi and Oak Technologies, having originally run chip maker Intel Korea's operation, including the Samsung-Intel partnership in the 1980s and early 1990s.

Sohn, who is the first non-South Korea-based top executive at conglomerate Samsung, said in 2013 that his role at the group was to change its "decision-making process".

This decentralisation has already begun but power ultimately remains rooted in South Korea.

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 said 2016 had been "an eventful year and more is to come".

Its most recent deals include Next Insurance, a US-based online insurance platform focused on small and medium-sized enterprises, which this month raised $29m in its series A round involving Markel and Nationwide Insurance as well as Munich Re/HSB Ventures as new backers.

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.

She added: "As part of this, we are in the process of setting up our new fund structure and capital commitment, as well as hiring in both San Francisco and Europe. We have a new office in London, led by Sophie Dingreville, who joined us from Iris Capital."

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."

She 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.

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.

Emma Lloyd SKY

Sky, an entertainment and communications business in 22 million homes across the UK, Ireland, Germany, Austria and Italy, was under offer at an enterprise value of £18.5bn ($22bn) from shareholder 21st Century Fox and going through regulatory reviews in the spring, but this has yet to stop Emma Lloyd, director of business development, strategic partnerships and investments, or her team.

The £10.75 a share offer was 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.

Its early success over the past three to four years include 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.

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.

Susan Lyne AOL

At the Shift: Accelerating Corporate and Venture Partnerships conference in New York at the end of October, Susan Lyne, president and founder of BBG Ventures, a VC firm backed by AOL, said it was "important to get women at the investment table".

She referenced Jess Lee, Polyvore's CEO, who had recently joined prestigious venture capital firm Sequoia Capital as its first female investing partner in the US.

Lyne herself had taken charge of a then new AOL investment fund backing female founders in September 2014.

The $10m-$12m Build Fund focused on finding early-stage consumer internet and mobile companies with at least one female founder. One of its earliest deals in 2014 had been a $2m seed round for Beautycon, a US-based beauty media, event and e-commerce company, which in March this year raised $9m from investors including media company A+E Networks.

And she has already been seeing some successes, with Scripps Networks Interactive this month agreeing to acquire online food publication Spoon University, a New York-based digital food publication, for about $10m compared with the $2m in venture funding it raised from investors, including BBG Ventures.

BBG Ventures grew out of AOL's BuiltByGirls initiative, founded by Nisha Dua, also now a partner at BBG, which "aims to inspire and support women and girls to claim their place in the tech-enabled economy by imagining and building the great products of the future or by tapping technology to power their work, play and passions". BBG Ventures has just expanded Wave, a programme that pairs young women with mentors in technology companies, to 350 from 150 mentors. Lyne was previously chief executive of AOL's brands group.

Prior to joining AOL in 2013, she was chairman of online shopping website Gilt Groupe and stepped down from Gilt's board in February after department store chain Hudson's Bay Company agreed to acquire Gilt for $250m. Despite being one of the largest exits of the year, it came less than five years after Gilt raised $138m at a $1bn valuation and had total funding of about $290m.

Kai Nin (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, has had a busy year.

In January last year, 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, leading Youon Bike's series A round, joining car-sharing platform Didi Chuxing's $4.5bn round and a $100m C round for second-hand car market Souche.

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.

Nathan McKinley USAA

Nathan McKinley is vice-president of corporate development at USAA, a financial services provider for military personnel and their families. He is responsible for its $330m venture capital fund, mergers and acquisitions, joint ventures and intellectual property transactions. He is on the board of USAA portfolio companies CafeX, ID.me and MX.

In March, ID.me raised $19m in its series B round, while CafeX's $21m B round had closed two years before and the same month as MX, a personal finance startup formerly known as Money Desktop, raised $30m in its A round.

McKinley said: "USAA provides financial services to the military community, and we do so with a focus on innovating new ways to serve them, including by inventing the ability to deposit cheques remotely using devices such as mobile phones and home scanners.

"We have over 50 patents that cover Deposit@Home and Deposit@Mobile online and mobile cheque deposit technology. We also do that by investing in innovative companies that could help us serve our members better. In 2016, we doubled the size of the team, made nine investments, and signed an intellectual property commercialisation agreement with Persistent Systems."

USAA's exits include SiriusXM's acquisition of Automatic Labs, a US-based provider of connected vehicle services for $115m, according to a regulatory filing seen by news provider Fortune. Automatic had raised $32m of funding, $24m of which came in a 2015 series B round backed by Comcast Ventures, USAA and CDK Global.

McKinley has worked at USAA since 2006, and has managed bank product management, retail marketing, enterprise innovation, and the military affinity group. His team understandably has close ties with the military – Adam Holcombe, a GVC Rising Star 2016, received the Bronze Star during his time as an engineer officer in the US army.

Beforeto joining USAA, McKinley spent 16 years with MBNA America and left as senior vice-president of product development after the acquisition by Bank of America in 2006.

Bernhard Mohr EVONIK

Bernhard 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 after five and a half years working at Germany-based chemicals company 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..

Evonik Venture Capital invests globally in startups and specialist venture capital funds. Investments are guided by strategic goals and financial returns. Since inception, Mohr has built a team of 10 investment professionals, including Lutz Stoeber, a GCV Rising Star 2017.

Evonik Venture Capital has closed 17 investments, both direct and indirect. The investments are oriented toward the company's important megatrends of health and nutrition, resource efficiency and globalisation. Most recently, Evonik Venture Capital 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, 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.

Rumi Morales CME VENTURES

As Jalaluddin Rumi, a 13th century sufi poet, said: "What you seek is seeking you." It is a quote that could apply to Rumi Morales, executive director and head of CME Ventures following the departure of Mark Fields to one of its portfolio companies, Wickr.

Morales runs a three-person VC team with Brandon Gath and Justin Strausbaugh, and has found a role that fits her areas of interest and expertise, though she noted it was always a challenge to find time for both supporting existing portfolio companies and investing in new ones.

It is a balance she has found, as CME Ventures by the end of last year had made 22 investments in 14 portfolio companies, with 11 public:
- Dwolla, a real-time payment network, series D round with Andreessen Horowitz.
- 1QBit, a quantum computer software company, series A and B round with Royal Bank of Scotland.
- Powerlytics, an economic data software company, series A convertible note.
- Ripple, a payment protocols company, series A and B round with IDG and Santander Ventures.
- Fortscale, a security and user behaviour analytics company, series A with Intel Capital and Blumberg Capital.
- Wickr, a secure communications platform run by Mark Fields as CEO, series A and B with Breyer Capital and Alsop Louie Partners.
- SparkCognition, a developer of cognitive analytics for the internet of things, series A with Verizon Ventures.
- Digital Currency Group, a blockchain fund, series A with Bain Capital Ventures and RRE.
- Digital Asset Holdings, a blockchain applications company founded by former JPMorgan Chase banker Blythe Masters, series A with JPMorgan and Goldman Sachs.
- Orbital Insight, a satellite image analysis company, series B with Google Ventures and Sequoia Capital.
- Nervana Systems, a deep-learning cloud company in which CME backed the series

A with Data Collective and DFJ Capital. It was acquired by Intel last year for a reported $400m.

This portfolio reflects Morales' areas of expertise, which include artificial intelligence, quantum computing, and distributed ledger and blockchain technologies, which CME parses into three main sectors for investment – digitisation, security and next-generation data. These areas chime with the group's needs.

John Pietrowicz, CME's chief financial officer, said: "Market participants around the world rely on CME Group for managing their risk across every major asset class, so it is critical for CME Group to stay ahead of technology innovation. Rumi has provided outstanding direction for CME Ventures, ensuring we invest strategically with partners who are pioneering technologies in spaces that could affect financial markets in the future, including artificial intelligence, digitisation and cybersecurity, among others."

Before November 2013's move to CME Ventures, Morales was executive director in the financial exchange provider's international corporate development and finance unit, where she sourced, structured and negotiated international business development opportunities with other global exchanges.

Before joining CME Group, she spent several years at investment bank Goldman Sachs, last serving as head of the Asia arm of its Global Markets Institute based in Hong Kong. Prior to Goldman Sachs, she was a principal at venture capital firms based in New York, London and Kuala Lumpur, including Beechtree Capital and Petra Group.

She received an MBA from the New York University Stern School of Business, and has been listed among Institutional Investor's 2015 and 2016 Fintech Finance 35 most powerful dealmakers in financial technology. She is reported to have advised the mayors of Chicago and London on the importance of financial innovation.

Majid Mufti SAUDI ARAMCO ENERGY VENTURES

Five years after his last appearance in the Powerlist, Majid Mufti returned to venturing last summer as head of oil company Saudi Aramco's corporate venturing program following a period of working internally.

In 2012's Powerlist, Mufti was chief investment officer of Saudi Aramco Energy Ventures (SAEV) – a position currently held by Bruce Niven, a GCV Rising Star 2017. Now as CEO, Mufti said: "We were one of the more active CVCs in energy last year with eight new deals added to our portfolio."

These deals included SAEV investing $2.2m in Norway-based Cannseal and €10m ($11m) in Airborne Oil & Gas's €23m series C round.

Other portfolio companies include Siluria, which produces the bulk petrochemical ethylene, Novomer, which uses CO2 and CO to make petrochemicals, 908 Devices, producer of a handheld mass spectrometer, ConXtech, which enables steel structures to be built in a fifth of the regular time, Zilift, a maker of downhole pumps that do not require a rig, and InflowControl, which makes autonomous downhole valves that prevent water entering oil wells.

Mufti added: "We also had our first partial exit with the corporate organisation buying a key business from one of our portfolio companies. We are investing in relevant deals that matter a deal to the corporate organisation. SAEV was also compensated at fair market value, giving us a great return as a separate organisation."

This is helpful, given Saudi Aramco is preparing for a 5% flotation late next year.

Before the launch of SAEV, Mufti was based in Hong Kong as a joint venture manager handling Aramco's downstream investments in China. He started his career as a physical products trader in Asia and a process engineer at a Shell joint-venture refinery. Mufti has a chemical engineering degree from Northeastern University and a master's degree in finance from NYU Stern.

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.

Amgen Ventures looks for investments that can help its parent's strategic areas of focus in oncology, cardiovascular, inflammation, bone health, nephrology, metabolic disorders, neuroscience, and discovery research and technology.

Its deals in the past year have included pain management drug developer SiteOne Therapeutics, which secured Amgen as a research and development partner and lead investor in its $15m series B round in January this year, while Akili Interactive Labs raised $11.9m in an extension from Merck Group and Amgen, raising the round's total to $42.4m last summer.

Its exits have included Ra Pharmaceuticals, which floated in the middle of its range to raise $91.6m in October. Fund activity includes Amgen's European affiliate joining limited partners including Cleveland Clinic, Maccabi Healthcare Services and Medison Pharma to back the eHealth Ventures incubator.

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".

She manages Roche's Sfr500m ($530m) evergreen venture fund, which means it can reinvest in new deals the proceeds from exited portfolio companies, and its portfolio companies include genetics testing company 23andMe.

Roche's recent deals include Vivet Therapeutics' $41m series A round this month and

Sutro Biopharma spinout SutroVax, which raised $64m, $60m of that coming from a series B round backed by Roche Venture Fund. The SutroVax round was co-led by Pivotal BioVenture Partners, a $300m fund recently formed by Roche Venture Fund alumnus Tracy Saxton, a GCV Rising Star, that is funded by property group Nan Fung.

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 last year, 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.

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.

Since March last year, he said Telus Ventures had made 16 investments, new and follow-on, including cybersecurity startup Zenedge's $6.2m round in March, and achieved six exits, including the $600m-plus sale of Veracode to CA Technologies, a $23m trade purchase of Rx Networks by China-based BDStar Navigation, and a $75m undisclosed secondary exit from Vision Critical Communications, a company it first backed in 2004. Just half a dozen previous exits had returned more than $37m to Telus from sales of Clairmail, Kinlogix Medical, Ruckus Wireless, Teradici, TigerText and Widevine Technologies.

Osborn said he had made a number of new team hires across Canada, including moving Jonathan Wolkin to ventures from within the corporation, and adding its first entrepreneur-in-residence.

He has also moved to expand the ventures unit's connections inside and outside Telus. He said of last year's highlights: "Launched 1st Step, a market forces workshop exercise to help entrepreneurs understand their environment in a more structured way; struck and expanded a number of national incubator and accelerator partnerships; invested in our first fund, Scale Up Ventures, backed by Ontario's provincial government; launched Telus Ventures bench, from which Telus's mid-level staff act as resources for our portfolio companies, and held our first annual ventures Carrier Summit."

More than 300 people attended the summit, including entrepreneurs, executives, investors and representatives of eight international carrier corp development and venture groups.

Telus appears ubiquitous as a phone operator, alongside peers Bell Canada and Rogers, 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 also chairman of Telus Ventures and was instrumental in hiring Osborn, who promptly launched a "catalyst" program for "ventures-led growth initiatives in a number of areas, such as precision medicine and primary care plus, in which we incubate, invest, partner or acquire in a series of thematic areas".

From an impressive base, therefore, Osborn has quickly made his mark in a company that, almost uniquely among Canadian corporations, has taken venturing seriously.

Telus CEO Darren Entwistle said: "Telus Ventures has played a critical role in ensuring we embrace innovation opportunities that advance our country's digital economy and Teluss' leading performance."

Charles Pan FOXCONN

Charles Pan, special assistant to the chairman of Taiwan-based manufacturer Foxconn, is also its chief investment director, covering all areas outside health, which is led by Francis Chen.

It is a privileged position Pan has held at Foxconn (also known as Hon Hai) since 2012, but one to which he brings advanced skills as effective head of its global investment and mergers and acquisitions team.

His previous role was starting and running France Telecom's Greater China corporate development team for four years as managing director of Orange Capital and so managing dollar and RMB venture funds. Earlier, he spent a year as chief financial officer at eDynamics after seven years as a venture investor for ID SoftCapital and Crimson Investment.

His LinkedIn profile identifies more than $2bn of financings executed, three investment franchises established and more than $400m of VC and private equity funds raised.

At Foxconn he has led investments in Migme, where he is also an executive board member, and Company A, and formed an incubator in Beijing for wearable devices. Others included Best Logistics, a warehousing and delivery services provider for the e-commerce sector in its earlier days.

But Foxconn has been expanding into strategic investing rapidly. In February, Foxconn said it would pay $600m for a 54.5% stake in investment fund SoftBank Asia Capital, currently wholly-owned by Japan-based telecoms firm SoftBank. The transaction will turn SoftBank Asia Capital into a joint venture, with Foxconn taking over management of the fund.

The two corporates previously partnered when Foxconn committed cash to the $100bn SoftBank Vision Fund in January.

Working with smart peers has been a sensible strategy for Foxconn. In Europe and

Israel, Foxconn has tended to invest through Ginko Ventures, and last year China-based venture capital firm Sinovation Ventures raised about RMB4.5bn ($675m) for two funds with Foxconn among the investors.

Foxconn was the anchor investor in a $300m dollar-denominated fund, which Sinovation closed alongside a $375m renminbi-denominated fund. It plans to target artificial intelligence, enterprise software and entertainment production companies with both funds.

Sinovation is the VC firm formerly known as Innovation Works. Kai-Fu Lee, its co-founder, said: "We have always worked closely with Foxconn."

Foxconn has being investing more directly too. Last month, Katerra, a US-based design and construction software developer backed by contract manufacturer Foxconn, emerged from stealth having raised $130m at a valuation of more than $1bn.

The same month, France-based internet-of-things technology provider Actility secured $75m in a series D round that featured a range of corporate investors including Foxconn and Orange through its Orange Digital Ventures unit.

Foxconn has also invested $120m in China-based ride-hailing platform Didi Chuxing at a $33.7bn valuation.

Foxconn's other large deals include Mobike, whose backers also include internet company Tencent, in a $300m round this year, CloudMinds, a China-based cloud-based artificial intelligence technology developer also backed by telecoms group SoftBank, in a $100m series A round, and Face Plus Plus, a China-based facial recognition technology producer, which secured $100m in series C funding from investors including a reported $20m from Foxconn.

Maria Peterson JSR MICRO

Maria Peterson, head of corporate venturing and innovation at electronics company JSR Micro, has been "seeking new enabling technologies and exploring new market opportunities in semiconductor, energy storage and display to augment JSR core technology, with a vision to the future interconnected world".

It is a broad remit, but since joining the Japan-based company in 2004 it is one she has accomplished with deals including US-based 3D printing technology developer Carbon, which expanded its series C round to $81m from corporate and undisclosed existing investors including JSR. Founded in 2013 as Carbon3D, Carbon has built a 3D prototyping machine that can print parts with mechanical properties and finish comparable to injection-moulded plastics.

JSR was also among the corporate backers when Canada-based venture capital firm Pangaea Ventures raised about half of the C$105m ($80m) target set for its fourth fund.

However, her team suffered a blow when Yosuke Yamamoto left to join Japan-based venture capital firm Universal Materials Incubator (UMI), which is centred on investment in materials startups and carve-outs.

Peterson, who was part of the GCV delegation to Canada for last month's Canadian Corporate Innovation conference, has also helped push JSR Micro into healthcare, with a fund commitment to life sciences investor Burrill & Co.

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.

When asked for last year's Powerlist award about his plans for the year he said: "Expand the investment mandate, team, geographic focus and improve processes, open an office on the west coast [of the US, as its office was then in New York], evaluate the opening of offices in Asia and Israel."

And do deals. BMW i Ventures had make 20 investments in 14 companies over the previous four years and its activity ramped up last year.

Listing his achievements last year, Quay said BMW made nine new investments, including Carbon 3D's $50m round from strategic investors, Desktopmetal, Nauto, Rever, Skurt, Scoop, and three unannounced investments, as well as three follow-on investments, such as Chargepoint, which raised $80m in a round led by Daimler. In addition, Quay said Turo was about to raise a round at a valuation of over $500m.

These deals came after Quay 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.

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, and the promotion of Christian Noske, a GCV Rising Star, from principal to partner. Other people could be hired this year, Quay said.

The bigger fund came with a broader investment mandate, ranging from mobility to general automotive and transportation, Quay added. However, still on last year's to-do list is potential international expansion to Israel and Asia.

Mike Redding ACCENTURE VENTURES

Relationships are everything in business. With his 25 years at consulting firm Accenture working directly with global 2000 C-suite executives, Mike 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, 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 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."

To support this approach, Accenture Ventures focuses on direct corporate venturing investments in individual startups that have an immediate impact on the strategic agendas of Accenture's clients.

This textbook emphasis on being a "corporate strategic" means Accenture Ventures invests in priority domains that will help the company's clients to succeed. Based on Accenture's vision of the future, these domains include AI, blockchain, cybersecurity, vertical software-as-a-service and crowdsourcing.

"The whole point of our disciplined investment program is to put Accenture's money where its mouth is," Redding said. In the past year, Accenture Ventures has added nine strategically-aligned deals to its portfolio.

As these equity investments bed down, Accenture Ventures' strategy comes full circle, enabling Redding to leverage his business relationships to match startups in these priority domains directly with Global 2000 companies that can use the innovations to compete and thrive.

"We are harnessing the power of Accenture and providing credibility to these startups, while building relationships with them as they grow and succeed in the enterprise market," he said.

As part of the Accenture Innovation Architecture, launched by Accenture Ventures in September, Redding's team, which includes GCV 2016 Rising Star Pramila Mullan, have combined with other tier-one financial and corporate venture investors backing a unber of sectors, among them:
- Artificial intelligence – Mighty AI (Intel, Google Ventures, NEA, Madrona, Foundry Group).
- Blockchain – Digital Asset Holdings (IBM, Intel Capital and 10 other corporates), and Ripple (Intel, Standard Chartered).
- Cybersecurity – Endgame (Columbia Capital), Claroty (Bessemer, ICV Capital, Innovation Endeavors, Marker, Microsoft).
- Vertical software-as-a-service – nCino (Insight Venture Partners, Salesforce Ventures), Dynamic Action (West Coast Capital), RichRelevance (DFJ, Greylock, Centreview Capital).
- Crowdsourcing – Applause (Goldman Sachs, Credit Suisse, Scale Venture Partners).

"In addition to my core investment responsibilities, I presented thought leadership on emerging and disruptive technologies at more than 50 events in the past year, such as the 2016 Montgomery Summit and the keynote at the 2016 AI Summit in New York," said Redding.

He previously spent five years as the global managing director in Accenture Labs, so he is tuned in to Accenture's R&D efforts and his presentation topics include sharing the Accenture Technology Vision – Technology for People: The Era of the Intelligent Enterprise, an annual research-based look at the implications of the biggest technology trends over the next three to five years, as well as deep dives on specific trends.

Accenture is also a large filer of patents given its research, and last year the consultancy firm caused reported upset in the fintech community by filing a patent for an editable blockchain feature.

Redding has set his sights on Accenture Ventures' global expansion to a robust portfolio, with direct startup investments in Europe, Israel, India and China. In the coming year, Accenture Ventures also plans to expand its priority domains to include augmented and virtual reality and quantum computing.

This led Accenture to form 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.

Finally, Redding 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: "Now Accenture Ventures is bringing our best to the next generation of future technology titans."

Jörg Richtsfeld ALLIANZ

Jörg Richtsfeld has been at Germany-based insurer Allianz Group since 2013 "contributing to performance management, innovation and digitisation", according to the company, but perhaps his greatest work has been in building up Allianz Ventures with an initial fund size of €430m ($450m) to last its first four years.

Allianz Ventures invests in and partners "promising digital companies to gain access to new business models, innovative products and services and emerging technologies," Richtsfeld said.

It is a natural fit for someone who has focused his career on strategy, innovation and corporate development and spent the past 20 years working for large multinational organisations in financial services, telecoms, media, technology and electronics, including broadcaster Sky, industrial group Siemens, consultancy Capgemini, and as CEO of Nymphenburg, the investment trust of family office House of Wittelsbach.

Allianz Ventures' first seven investments include Argus, Quantemplate, two rounds in Berlin-based Simplesurance, driving aid Nauto, Moneyfarm and roadside assistance mobile app Urgently. Last month Lemonade, a US-based insurance company powered by artificial intelligence and behavioural economics, was also backed by Allianz.

With many of these deals, such as Urgently, Nauto and Moneyfarm, Allianz and its subsidiaries have partnered the portfolio companies.

Richtsfeld, who completed his PhD at the University St Gallen in banking and finance after working as an assistant to the Swiss institute's president, said Allianz has also sought to build partnerships with startups outside of equity deals. Earlier this year, Allianz partnered Startup Health, while other deals include Snappcar, Drivy and Move24.

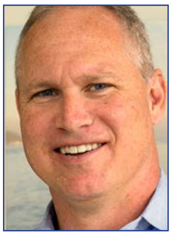
Richtsfeld works closely with Marc Oerke, head of digital corporate ventures at Allianz for the past two years, and together they are preparing a new fund structure to be ready by the third quarter of this year.

Its intended venture model covers company building where the insurer is the majority owner, minority-owned venture investments and funds of funds, particularly where they will help Allianz gain "even better entry and insights into the highly competitive US venture market and potentially others".

Regarding company building where it has majority control, Richtsfeld said it would "ideate and pair innovative business models with driven entrepreneurs" in "strategically relevant global assets".

The entrepreneurs-in-residence program provides the people and environment to build businesses from scratch and so give Allianz Group "access to its own highly valuable talent pool," and the "reputation as an active driver of innovation not just a passive investor", he added.

Solmaz Altin, chief digital officer at Allianz Group, said: "Jörg and his team have been instrumental in developing Allianz's venture strategy and building the foundation as a trusted player in the startup and venture ecosystem."



Tom Rodgers McKESSON

Tom Rodgers' return to US healthcare provider McKesson in 2014 has inspired a fast-moving corporate venturing unit launch and the hire of top industry names, such as Dave Schulte.

McKesson Ventures, the company's $250m corporate venturing unit, made six deals in its first 10 months, Rodgers said, and a handful more last year. In August, Shyft Analytics, a US-based provider of cloud analytics software for the life sciences industry, raised $12.5m in series B funding from investors including McKesson and Medidata Solutions. Komodo Health raised an undisclosed stealth round also including IA Ventures and Felicis, while Landmark is a New England-based owner, operator and management services provider for older people.

A decade ago, Rodgers 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."

Sam Salisbury and Christophe Defert CENTRICA

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 UK-listed energy utility.

Centrica launched CI in January to invest £100m ($125m) over the next five years in startups and incorporate its existing £10m Ignite social impact fund started in 2014.

Iain Conn, Centrica's group chief executive, said: "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."

Salisbury added: "This builds on what we have already achieved through Ignite, which began funding enterprises in 2014. Ignite will continue and will become part of CI. We will embed social and environmental impact into our investment decision criteria. CI will also support an internal culture of innovation. Learning from outside companies and entrepreneurs will help Centrica teams incorporate the mindset and ideas of startups and entrepreneurs to embed them into our ways of working. To help achieve this aim, CI will support in-house ventures."

Both London-based Salisbury and San Francisco-based Defert have each spent nearly seven years with Centrica. After being a consultant at Arthur D Little, Salisbury worked in corporate strategy and then Ignite, first as an investment principal under Julia Rebholz, who was included in the GCV Powerlist 2016, and then leading it after her departure last summer.

Defert's time at Centrica has been in mergers and acquisitions, business development and most recently as chief of staff for the CEO of the Direct Energy subsidiary in North America. Additional hires are expected in New York and Israel.

The Ignite fund, which won GCV's corporate impact venturing award in 2016, had three clear goals. First, to create commercial benefits for the parent company by working with new, disruptive and profitable business models and technologies.

Second, Ignite's investments and partnerships would give Centrica's employees the chance to broaden their experience and increase their skills by working as mentors or non-executive directors. Finally, the fund was a way to support social enterprises delivering positive outcomes – from increased employment to reduced carbon use – to the communities in which Centrica operates. Salisbury said last year's accomplishments had reflected these goals.

He said: "We have had a number of financial successes with our Ignite social impact investment portfolio. We have had two exits – the acquisition of E-Car Club by Europcar and the refinancing of Energise Barnsley, which allowed our construction financing to be repaid by a combination of bank loans and a community bond issue.

"We have also seen substantial jumps in valuation in three of our enterprises – because they have received new investment – and secured further investment from Ignite for four enterprises already in our portfolio. We have now committed £9m of investment to 14 enterprises and have received £2m of sale proceeds and repayments. In January we took on a further nine teams into our pre-investment accelerator program.

"Through our investment and support, Ignite has created over 100 jobs and 26,000 people benefit from the services of our portfolio companies.

"We continue to give Centrica employees a chance to broaden their experience and increase their skills. They work as mentors, non-executive directors and on projects with our enterprises. Last year more than 100 employees worked with one of the enterprises in our portfolio."

Rob Salvagno CISCO SYSTEMS

Cisco Investments, the corporate development team at computer network equipment supplier Cisco Systems, reportedly has more than $2bn of investments in 100 companies and 40 venture funds.

Rob Salvagno, head of corporate development and investments at Cisco, leads its

40-strong investment team deploying a committed $300m over the next two to three years. The company in October 2015 promoted him after Hilton Romanski, its senior vice-president of corporate development, became chief strategy officer.

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. Cisco's strategic priorities are in the areas of data centres, cloud, security, big data, internet of things and core network equipment.

In February, Cisco Investments and venture capital firm Lightspeed Venture Partners co-led a $30m series C round for US-based cybersecurity technology producer Exabeam. At the time, Salvagno said: "Exabeam's behavioural analytics is a powerful tool that helps companies prioritise and focus on the most damaging threats they face."

In November, Cisco invested $2m in US-based customer support platform developer Helpshift to boost its series C round to $25m. Salvagno said: "We look forward to supporting Helpshift to enable companies to provide best-in-class mobile customer care through their data-centric messaging platform."

In June, US-based IT operations analytics software producer Moogsoft raised $30m in a series C round over two tranches. Salvagno said: "Moogsoft's differentiated machine-learning approach to automate and simplify IT operations is a unique solution for increasingly complex incident management processes.

"We are excited to back a team with such a strong track record, and through our continued investment in Moogsoft, we are able to foster a close business relationship, internally pilot their solutions, and encourage technical collaboration opportunities between our engineering teams."

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.

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.

Last year, Amex Ventures invested in nine new companies, including three international investments – Simplee, Tapzo and IndiaLends. Others were Boxed, Mezi, Tradeshift, Signifyd, Plaid and InAuth. American Express acquired mobile device authentication company InAuth in December – the first such purchase of a portfolio company – to complement its fraud prevention and security capabilities. Deals this year include anti-fraud provider Signifyd, which closed a $56m series C round this month.

Amex Ventures invests in startups that can foster and enhance innovation across American Express, so it is no surprise that some could be acquisition targets. But probably more important to the companies are the partnerships between these startups and Amex's business units. The company said two-thirds of its portfolio companies has such commercial partnerships.

Last year, American Express teamed up with Boxed to integrate Amex Express Checkout and provide perks for card members. Amex partnered Tradeshift in its launch of Tradeshift Go, a chat interface for approving and facilitating employee purchases, which integrates Amex's vPayment for transactions.

Accertify, an American Express subsidiary, integrated Signifyd's service into its fraud-management platform for enhanced fraud screening. Accertify merchants who use the service will qualify for Signifyd's fraud-free guarantee.

And Amex has worked with portfolio company Mezi to pilot white-label digital concierge application AskAmex, which helps users find and book travel, dining and other things from an iPhone.

Ken Chenault, chairman and CEO of American Express, added: "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, who leads a team including partner Rohit Bodas, a GCV Rising Star 2016, said more was planned this year. "Our mission is to facilitate and build lasting connections between American Express and the startup community in order to drive growth for all parties. Our goal is to drive American Express towards cutting-edge innovation through partnerships with startups. We will also continue to use American Express's global scale to support international entrepreneurs and innovation around the world."

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.

Reese Schroeder MOTOROLA SOLUTIONS VENTURE CAPITAL

After winning GCV's lifetime achievement award last year, Reese Schroeder has maintained the discipline and focus that has made his name in the industry over the previous two decades.

He said: "In 2016, we made five new investments, four of which are public – SeamlessDocs, DevMynd, RapidSOS and Neurala. All these investments have a working relationship with Motorola Solutions. We also had a couple of great exits – API.ai and Eyefluence, both of which were sold to Google [for undisclosed amounts]. Finally, we instituted a project management process for post-investment portfolio company management, which we highlighted at the Canadian Corporate Innovation summit."

And there are no plans to stop. Schroeder said: "In 2017, we intend to add about six new investments to the portfolio. Our focus is on edge analytics – the intelligent edge – voice technologies, such as chatbots and intelligent assistants, the internet of things, cybersecurity and mobile apps.

"We have a great pipeline and are very enthusiastic that 2017 will be another great year for Motorola Solutions Venture Capital."

The group is also hoping for another exit with ShopSpotter, a developer of gunshot detection systems, planning to float on the Nasdaq stock exchange, according to a regulatory filing. ShopSpotter had raised about $70m, with Motorola Solutions owning 15.6%, before the initial public offering.

Its investments include last month's backing of emergency assistance technology developer RapidSOS, which closed a $14m series A round.

Schroeder's initial involvement with Motorola's corporate venturing unit came when it was set up in 1999. He assisted on the transactional side of the business until 2004, when he was made managing director of Motorola Ventures, seven years before the company split into Motorola Solutions and Motorola Mobility, subsequently acquired by Google.

The unit has always focused on investments with potential strategic value to the wider company, Schroeder said for last year's lifetime achievement award. "If it was strictly a financial investment we would find great companies and invest in them. But as a strategic investor we have to find a strategic thesis for the companies that we meet and then we have to try to connect them to the right people in the business and make sure they have the right level of support.

"As the business has grown and changed, the kinds of company we invest in has also changed. So today, if you look at our business, which is very public-safety mission-critical intel-focused, we are very focused on companies which can help accelerate our business in that space. This is very different from seven or eight years ago when we were investing in companies that would help our cable set-top box business or our mobile phone business."

Paul Steinberg, chief technology officer at Motorola Solutions, said: "Reese was in on the ground floor when Motorola formed its venture group in 1999 and we have done well over 200 investments since that time. This is one of the longest-standing corporate venturing groups in industry.

"The thing about Reese that makes him amazing is that there is very little he has not seen. He is very innovative in creating win-win situations with investments, he is very creative around deal constructs, and he is very thoughtful not only of what is good for Motorola Solutions but also for investees."

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.

Andy Palmer, CEO at Tamr, 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 last year, 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 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.

More recent deals include last month's $90m round for Cohesity, a US-based econdary 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 last year where I serve as a board observer – Hexadite, SafeBreach and KeenIO.

"We hold HPE's largest partner-customer conference twice a year and at HPE Discover London in December our corporate venturing program was highlighted on the main stage during [CEO] Meg Whitman's keynote on day one in front of approximately

12,000 people. We launched the Pathfinder Academy at our Worldwide Ambassador Summit in February. The academy is intended to train our sales organisation – starting with technical sales and account chief technologists – on the Pathfinder portfolio solutions. The ultimate goal is to integrate these solutions with our own and broadly take them to market.

"This will be key in unlocking the value of the Pathfinder portfolio solutions and scaling them broadly across HPE customers and geographies. We have also signed reseller agreements with several of our portfolio companies and have created the right incentives for our salesforce to resell our Pathfinder portfolio solutions.

"In the year ahead we look forward to continuing to drive partnership and investment activity. The next year will be critical in our efforts around broader sales enablement and go-to-market activities with more integrated solutions."

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 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 venturing 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 last year, 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 made three investments and Seiffert said this year he hoped to add two more, one covering Brazil and the other the global market.

José Antonio Filippo, Embraer chief fincancial oficer, said: "The operation of FIP

Aeroespacial has enabled the development and consolidation of the competence in corporate venture capital at Embraer. Since it was created in 2014, it has been supporting small and medium-sized innovative companies throughout Brazil, having already achieved important results.

"The corporate venture capital approach allows investment in new opportunities, with risk-sharing and resource leverage. In addition, such investments are executed faster and at a lower cost, ensuring that Embraer executives remain focused on current businesses."

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.

Seiffert said he had already helped more than 10 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".

Paul Sestili ROGERS VENTURE PARTNERS

Paul Sestili said Rogers Venture Partners (RVP) was proud to be the most active Canadian corporate venture investor, according to GCV Analytics data presented at the inaugural Canadian Corporate Innovation Summit last month.

He added: "RVP has had an exciting past couple of years. We have invested in emerging technologies, such as blockchain, and disrupting the healthcare and finance verticals, with investments in PokitDok and SecureKey.

"RVP has also focused on segments transforming digital media and the TV viewing and video advertising experience with investments in Cognitive Networks, acquired by Vizio, and Watchwith, acquired by Comcast.

"Personally, I have spent significant time exploring the transformation of marketing automation within small and medium business, with investments in Yodle, acquired by Web.com, and Five Stars. The RVP team continues to conduct industry deep dives and white papers, most recently within virtual and augmented reality, while analysing investments across the entire stack."

Having originally worked at oil major Chevron's corporate venturing group in the late 1990s, Sestili was a venture capitalist at APV Technology Partners and then Mezzanine Capital Partners from 2000 until he joined the corporate venturing unit established by Canada-based telecoms and media firm Rogers Communications in 2013.

Sestili, who is also on the board of Next Issue Media, has also spent the past year as chairman of the corporate venture group of US trade body the National Venture Capital Association (NVCA).

He said: "It has been an incredibly enjoyable year working with many corporate and institutional investors around the world. NVCA's latest initiative, of which I am very proud to be a part, is the mentoring program, which we launched in January [at the Global Corporate Venturing & Innovation Summit].

"I will be presenting the initial data and feedback from the program during an unpanel session [at the GCV Symposium in London]."

For his GCV Rising Star award last year, Sestili said corporate venturing ultimately came down to networking. "In addition to getting to know our fellow corporate venturers, we need to work with as many financial VCs as possible. The best opportunities and outcomes result from introductions and co-investment within your network. The more people we all know, the better off we all are. And those networks are the building blocks for long-term corporate venture capital viability."

Vijay Shekhar Sharma ONE97

Vijay Shekhar Sharma, co-founder and CEO of One97 and its Paytm online payment platform, cites Alibaba's founder Jack Ma and Masayoshi Son of SoftBank as his inspirations, according to a profile in the Financial Times.

Perhaps luckily for him, therefore, he has an opportunity to thank them for their inspiration, as both are shareholders.

Founded in 2000, One97 oversees a range of online services as well as corporate venturing unit One97 Mobility Fund, but is best known for Paytm, the online payment platform it incubated and launched in 2010.

Alibaba and its financial services affiliate Ant Financial invested $680m in One97 in September 2015, after acquiring a 25% stake earlier in the year as part of a strategic partnership.

One97 had raised about $20m in initial funding from SoftBank's SAIF Partners before securing an undisclosed amount of series B capital from SAIF, Silicon Valley Bank and chip manufacturer Intel's corporate venturing unit Intel Capital in 2009. Alibaba, along with its financial services affiliate Ant Financial, reportedly owned about 46% of One97 as of March this year when it invested $250m at a reported $5.9bn valuation.

Last month, SoftBank was in talks to invest between $1.2bn and $1.5bn at a valuation of $7bn to $9bn, according to Livemint, though ET reports that One97 was seeking between $1.4bn and $1.9bn at an $8bn valuation.

SoftBank intends to acquire a 20% stake in One97 by buying shares in One97 from SAIF Partners and Sharma, as well as investing directly in the company, a source told Livemint. Regardless of the outcome of any SoftBank talks, One97 and Paytm has been a success, especially when the government demonetised to remove cash from the economy.

Sharma had already learned that corporate venturing can bring success. When nominating his colleague, Kiran Vasireddy, as a GCV Rising Star, Sharma said: "Kiran has been a true rock star in all the deals we have done. His negotiations skills are especially great. We, being a corporate investor, need rights beyond the capitalisation table spreadsheet. We need to build synergy with our core business.

"We were able to get better value in competing deals and could create tremendous shareholder value too."

Nearly two decades after his early software developments for RiverRun, Intersolutions and India Today, Sharma is in many ways the successful face of entrepreneurial India in the way Ma and Son have so often been seen in China and Japan respectively.

Bonny Simi JETBLUE TECHNOLOGY VENTURES

Bonny Simi is president of JetBlue Technology Ventures, 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.

In the 16 months since opening doors, it has closed eight investments, ranging from an internet-of-things mesh network startup, to electric-hybrid aircraft manufacturer Zunum Aero that aims to be the "Tesla of aircraft", to last month's $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.

Eash Sundaram, chief information officer at JetBlue and the executive sponsor of

JetBlue Technology Ventures, said: "At JetBlue Technology Ventures, our goal is to be part of a disruptive force rather than the one being disrupted, and we seek new technologies that look to change the game."

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 14 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.

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.

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."

Anne Sissel BAXTER VENTURES

Anne Sissel, vice-president and head of Baxter Ventures, the corporate venturing unit of the US-based healthcare company, ended last year 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. 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.

Sissel said: "We have accomplished quite a bit at Baxter Ventures over the last 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] 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 new 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.

"In terms of our great accomplishments on the deal side, I am quite proud of our investment in KitCheck [one of five deals after Baxalta]. We lead [its $15m] series C after a competitive process and have been valuable partners to the company in their growth. I joined their board last summer."

Baxter Ventures invests in companies, such as TVA Medical, 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.

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 last year.

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 earlier this 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 Beteilungs in 1995.

Nachtigal built up one of Germany's most active corporate venturing units. One former colleague said last summer, when asked about a succession plan, that "over the last 24 months we were extremely successful not only in making new investments, but also in returning money to our parent – two-times profitable exits to third parties".

During the past decade he expanded the corporate venturing team to 14 in offices in the US, China, Japan 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. It usually provides between €1m and €5m in funding with November's $4m investment in US-based technology company QD Vision, a leader in quantum dots (nanocrystals with unique electro-optical properties) as a good example..

John Somorjai SALESFORCE VENTURES

John Somorjai is the executive vice-president of corporate development and Salesforce Ventures at cloud computing company Salesforce and, since 2005, has been leading the evaluation, deal execution and integration of M&A and investments.

He 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.

This month, Salesforce 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.

Previously, Salesforce conducted minority equity deals through its corporate development function since 2009. It now has more than 150 investments, such as the reinvestment in Pendo's $20m B round, based in 13 countries, 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.

GCV Analytics has tracked 31 Salesforce deals in the past 12 months to the end of April and, while Salesforce Ventures does not disclose its financial returns, a company regulatory filing seen by news provider Wall Street Journal said the fair-market value of its privately held investments as of January 31 was $758.3m, and that included $232.3m in unrealised gains.

Most impressively, Salesforce Ventures has also exited more than 40 of its portfolio, according to Garratt. 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.

Ritika Suri INFOSYS

Setting up a $500m debut venture fund can create a wave of attention, especially in India. This is why Ritika Suri, who was promoted in October to executive vice-president and global head of corporate development at India-based technology provider Infosys and whose remit includes overseeing leadership of mergers and acquisitions and the Infosys Innovation Fund, was cautious about singling out any of her new team as a GCV Rising Star 2016.

For last year's Powerlist award, Suri said: "When we set up Infosys, we knew our uniqueness as a CVC would be in the fact that we would be technology agnostic."

She said Infosys would similarly seek to work with VCs and help vet ideas and plan entrepreneurs' first products, given its IT services pedigree. The Infosys Innovation Fund is earmarked for global investments in disruptive new technologies in India and globally and includes a startup incubator for seed and early-stage growth.

Suri, whose MBA was from Leeds Business School in the UK, was previously senior vice-president and customer officer for the technology, innovation and products group at SAP Labs in Palo Alto, California, until August 2014.

Yusuf Bashir, managing director of the Infosys Innovation Fund, moved with Suri from SAP. The team has struck eight deals in the past year, including a $4m investment in US-based data discovery platform Waterline Data, as part of a $16m series B round that closed in February.

At the time, Suri said: "We see a need for automated data discovery solutions like Waterline Data in helping our clients achieve greater business value from their big data assets. This investment underscores our commitment to our clients to bring innovative big data solutions across our platforms and offerings."

Waterline is one of about 10 deals and Suri was happy with the fund's progress. In November, Infosys invested in California-based startup TidalScale and then in Danish startup Unsilo to boost its artificial intelligence and machine learning technology platforms.

And the group has already seen positive exits. Microsoft said this month it could pay up to $70m for the cloud optimisation platform Cloudyn, which has raised more than $20m in funding including $4m from Infosys last August.

Infosys also agreed to commit Rs316m ($4.6m) to the first close of venture capital firm Stellaris Venture Partners' first fund. Stellaris – an early-stage venture fund established by partners Ritesh Banglani, Alok Goyal and Rahul Chowdhri, former executives at India-focused investment firm Helion Venture Partners – aims to raise $100m for its debut fund.

Masatoshi Ueno ASAHI GLASS

For more than 100 years, AGC Asahi Glass, a Japan-based producer of glass, advanced materials and chemicals, has pioneered some of the most important breakthroughs in glass and coatings.

It was perhaps no surprise, therefore, to see Masatoshi Ueno, senior manager at Asahi Glass, lead the $65m series C round for Kinestral Technology.

Founded in 2011, Kinestral has created a responsive form of smart-tinting glass called Halio that tints in sunlight to provide shade for a building's inhabitants, and which can also tint to a range of darker greys to complement the building's design. In total, Kinestral has raised about $117.5m of equity in series A to C rounds and a further $12m in non-dilutive partner funding.

AGC formed a strategic partnership with Kinestral in June 2016 to facilitate joint marketing and sales of Halio. The C round will support the commercial introduction of Halio in North America this year, and internationally in 2018.

Ueno said: "This year we will work hard to set up manufacturing sites and pre-marketing."

He added: "Other than the Kinestral project, we will work with other startups in augmented reality and connected and intelligent windows. In augmented reality, it is likely our product enables head-mounted displays. In intelligent windows, we will work with a startup that has unique data aggregation technology and cloud service."

He also noted for GCV's annual survey that autonomous vehicles were the most important area of development last year, and based in San Francisco, California, he has been at the epicentre of exciting developments for more than a decade.

Before joining Asahi Glass in October 2011, he was CEO of Yasuda Enterprise Development America for six years and part of a VC firm established in the 1970s since 2000, where his deals included innovative technology such as Plastic Logic.

George Ugras IBM

George Ugras replaced Claudia Fan Munce as head of US-listed technology provider IBM's corporate venturing unit after she announced her retirement from IBM in January last year during the Global Corporate Venturing & Innovation Summit.

For Ugras's Powerlist award, his CEO, Ginni Rometty, said: "IBM Ventures is essential to how we engage entrepreneurs and developers who are building innovative applications and technologies for cognitive solutions and cloud platforms. I am delighted to have George leading our efforts to amplify this essential component of IBM's strategy."

Ugras, who last summer joined the board of the corporate venture capital group of US-based trade body the National Venture Capital Association, said: "We are aiming to be one of the leaders in the new approach to corporate venturing. IBM Ventures is the application programming interface for IBM for the startup community.

"Our goal is to impact every aspect of our business – how we deliver products and services to our clients, ensuring innovation that now is being distributed across so many great startups is accessed by us and by our clients."

As well as GCV Rising Star Wendy Lung, Ugras has been building his team, including the hire of Christoph Auer-Welsbach, a partner of IBM Ventures, from January.

Ugras's career in the venture capital arena started at Apax Partners in New York, where he invested in early-stage technology companies. He subsequently moved to Silicon Valley and was a partner at Adams Capital Management, where he funded and helped to launch and run a number of companies in the enterprise sector.

In 2014, Ugras launched life sciences company CyteGen, funded by Thiel's Breakout Labs. CyteGen is tackling neurodegenerative diseases. Ugras has been an adviser to a number of incubators, startups, corporate and financial venture funds.

Philipp Ulbrich EON

Philipp Ulbrich stepped up to be vice-president of innovation scouting and co-investments at Germany-based energy utility Eon in May last year after the departure of Susana Quintana-Plaza to local peer Siemens.

Ulbrich joined Eon a decade earlier after completing his PhD at the Catholic University of Eichstätt-Ingolstadt. With Frank Meyer as overall senior vice-president of innovation at the company since 2016, Eon has what Ulbrich called a "well-planned" portfolio, half in Europe, half in the US and appetite to do more.

Ulbrich oversees a budget of more than €100m ($120m) for scouting, testing, development and initial launch of products and business models at the group, as well as its corporate venturing activities. Last year's €24m invested was its "best ever", he added, and he conducted two investments directly, including Kite Power Solutions in the UK.

He said seven of the 18 portfolio companies were in the Cleantech 100 list and there had been two exits, Robotix and OPower, while Thermondo, a digital heating company, was preparing for its series D round with a valuation of at least $100m. Nearly 95% of portfolio companies currently have a technical partnership with Eon, according to Konrad Augustin, a GCV Rising Star 2016 who joined Eon from BASF.

Geert van de Wouw SHELL

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.

Exxon's closure has also allowed peer Shell to claim on its website: "Continuing Shell's tradition as the first corporate venture fund in the oil and gas industry founded in 1998, we act as an investor and a partner in the commercialisation of innovation."

And Geert van de Wouw, managing director of corporate venturing arm Shell Technology Ventures (STV), has capitalised on the opportunity by continuing to invest through the oil price dislocation of the past few years. He said the "past year was very active and exciting for STV" with investments in Geli, Maana, Sense, Kite Power Solutions, Rocsole, Neomatix and two internal smart mobility incubation startups and, most recently in 2017, Halfwave.

Halfwave, a Norway-based based service company specialising in acoustic resonance technology, reflects how oil and gas companies are using venturing to reduce costs as oil prices remain under pressure and falling to $50 a barrel last month.

STV and University of Texas Investment Management Company funding will be used for Halfwave's pipeline and subsea services to check infrastructure and followed Energy Ventures and Chevron Technology Ventures backing the startup in 2012.

STV's investments have been separate from Shell Foundation's $250m commitment to impact investing, such as Envirofit, a social enterprise that develops low-cost clean cookstoves, which raised $4m, and D.light, a solar energy provider that has raised more than $22m.

Van de Wouw added: "We also co-sponsored and hosted Energy Fest at the Shell Technology Centre Amsterdam, an event that brought together investors, innovators, government officials and thought leaders to stimulate collaboration. We have recently opened an office in San Francisco, and may soon be adding personnel in other locations around the globe."

Vicente Vento DEUTSCHE TELEKOM

Vicente Vento, CEO of Deutsche Telekom Capital Partners (DTCP), was head of mergers and acquisitions for Germany's largest phone operator before taking over its corporate venturing unit in 2015.

He subsequently hired GCV Rising Star Jack Young from Qualcomm Ventures to be head of venture capital, managing a team of about 11. Since 1997, Deutsche Telekom has invested more than $2bn in more than 200 companies – with 70 listed in its current portfolio – and DTCP now has "the agility and flexibility of an autonomous investment vehicle with the strength and resources of our corporate sponsor".

DTCP manages two funds, one covering venture capital and the other private equity, and are structured with Deutsche Telekom as sole limited partner. The venture capital fund invests in Europe, Silicon Valley and Israel-based technology companies, according to Young, and "our typical first cheque size is $5m to $10m".

Its more recent deals include leading hotel industry data provider Fornova's $17m series B round. Deutsche Telekom Capital Partners also took part in a $45m series D round for Aryaka described as the first investment by a major telecoms company in global SD-WAN (software-defined wide area network) technology. The round increased the total raised by Aryaka, which is also backed by Sumitomo, to about $120m, and the company is targeting an IPO in 2018.

DTCP is based in Hamburg, Germany, and it opened an office in Silicon Valley, California, early last year. The team made eight venture investments from the start of last year to the end of November, including SafeBreach's $15m series A round, NS1's $20m B round and Paxata's $33.5m D round.

DTCP's exits include voice service Nexmo's sale to Vonage for $230m, and immersive sports company Replay Technologies' sale to Intel for $175m.

Vento is also a member of the board of Deutsche Telekom's Strategic Investments (DTSI) and Telekom Innovation Pool (TIP), and on the boards of Ströer Media, Scout24 Group and Strato. DTCP holds Deutsche Telekom's 10.9% stake in German online classified ads firm Scout24.

DTSI, run by managing directors Oliver Fietz and Michael Boshammer, was set up in 2015 to incorporate Deutsche Telekom's existing corporate venturing units, T-Venture and TIP. It will take on the responsibility of making follow-on investments in the T-Venture portfolio.

Arowana (Le) Yu PING AN

Arowana Le Yu and Jiang Zhang have been managing directors at Ping An Ventures, the corporate venturing unit of the China-based insurer, for nearly five years having both previously worked at consultancy McKinsey.

Ping An has made a statement of intent, committing this month $1bn to a healthcare and fintech fund, Ping An Global Voyager Fund, citing an ambition to become an "internationally leading technology investment pioneer". Ping An has made startup investments through its Ping An Ventures unit since 2012 and the firm's portfolio companies include unicorns Oscar, Mogujie and 58 Daojia.

Ping An Ventures has been highly active, with its 25-strong team publicising 36 deals on its website, including TripVIP and ZJ Wireless, and, more internationally, Hong Kong-based Prenetics, UK-based EToro, and US-based CliniCloud and 20/20 GeneSystems.

Ping An Group set up its ventures unit in 2012 with RMB1bn ($150m) to back new ideas and startups in finance, consumption, healthcare, automobile, social network and artificial intelligence. And while many of these deals are early-stage, Ping An has led larger deals, such as Mogujie, a China-based e-commerce platform based on social networking tools that raised $200m in November.

Under the ultimate leadership of Peter Ma, chairman of Ping An, Yu and Zhang manage a team of 21, of which more than half are women, according to its website.

Yu previously spent just less than a year at venture capital firm Kleiner Perkins Caufield & Byers, having once interned there, and completed his MBA at Harvard in 2009. Before this, he worked for US tech firms HP and IBM after his undergraduate degree in telecoms and finance at Shanghai Jiao Tong University.

Global Corporate Venturing

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