Global Corporate Venturing

THE WORLD OF CORPORATE VENTURING 2019

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THE DEFINITIVE GUIDE TO THE INDUSTRY

CORPORATE VENTURING HITS NEW HIGH

THE GLOBAL CORPORATE VENTURING SURVEY 2019

BEST PRACTICES – BENCHMARKING ELEMENTS

THE TRENDS OF 2018 AND THE BIG ISSUES FOR 2019

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- Raise your company's profile to increase co-investment and deal-flow opportunities
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- Join sub-committees to move the industry forward in areas such as deal flow, investment models, partnership approaches, innovation excellence and intellectual property

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

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FOREWORD

Wendell Brooks
president
Intel Capital

"A fundamental rule in technology says that whatever can be done will be done. You need to try to do the impossible."
– Andy Grove, former chairman and CEO of Intel Corporation

Dear colleagues,

Since 2016, I have had the privilege of running Intel Capital, one of the longest running corporate venture capital organisations in the tech industry.

Through up and down economic cycles, strategic pivots, and technology shifts, Intel Capital has consistently invested and driven value for our parent company, Intel. We do this by having a relentless focus on delivering value to our portfolio companies. I believe that we have played a role in trying to do the impossible. We are the forward-looking, visionary arm of Intel. We are at the epicentre of an amazing community of entrepreneurs driving new technologies forward – from artificial intelligence, autonomous and flying cars, advances in data analytics, to smart cities, smart factories and beyond.

One of the reasons I am passionate about my job as president of Intel Capital is that I am able to leverage the resources of Intel, the world's greatest engineering company. I believe there is a triangle of growth and innovation for large corporations with three elements – organic efforts, equity investing and mergers and acquisitions.

- At the top of the triangle sits research and development. Typically, this is where large companies invest the most. Wholly-owned products developed through R&D also have the highest return. At Intel we have a long history of technology and process innovation, and we have many smart people working in our organisation. But we don't have the market cornered on smart engineers, so we also…
- Make investments in outsider disruptors and entrepreneurs through Intel Capital. This second point on the triangle allows us to place meaningful bets on unproven technologies being developed outside of Intel. We look for driven people trying to tackle big problems – driving change in the entire ecosystem. We also look for places where Intel can add value to the startup.

- The final point on the triangle is M&A – both transformational and tech and talent acquisitions. We use M&A to fill the holes R&D and Intel Capital have missed. Transformational M&A can expand an addressable market or create a new business. Smaller, tech and talent M&A opportunities allow us to complement a business unit (BU) strategy, fill a product gap, or accelerates our roadmap and route to market.

Having these three elements as a solid base to examine both innovation and disruption allows companies such as Intel to evolve and thrive.

Equity investing can be an efficient use of capital when looking for innovation and growth. Although CVCs vary in how they balance strategic versus financial investing, most fall into a continuum of being financially focused and strategically relevant. If our returns as CVCs exceed the weighted average cost of capital for our parent companies, we have effectively made money and also gained valuable intelligence about the larger ecosystem. Internally, I call this "getting paid to learn".

Recently, venture capital has outperformed many other asset classes, causing many corporate CEOs and boards to take notice. In part, this helps explain why we have seen yet another record year for CVC activity, according to Global Corporate Venturing in this annual review.

But the data about the value and volume of deals, in which sectors and stages, and a host of other factors, is only part of the story. The bigger part is how the industry is set up to succeed and the unique survey of CVCs brings out the qualitative elements from the GCV Leadership Society, which I am proud to be chairing following in the large footsteps left by Claudia Fan Munce as the society's first chairwoman.

CVC organisations not only play a role in the growth of our parent companies, but also bring the resources of our organisations to help our portfolio companies succeed. These resources include technology endorsement, customer introductions, access to engineering and technical expertise, business unit collaboration, and company talent building. At Intel Capital, if we cannot add value for our portfolio company beyond dollars, we do not invest.

I am a strong advocate for partnering in the CVC industry. When we work together to share dealflow and add value to our portfolio companies, we can completely differentiate performance. I believe there is a multiplier effect when several CVCs bring our unique set of resources to the table. At Intel Capital we are committed to building a syndicate of CVCs that want to drive success for technology investing, and we have been a founding partner for the GCV Connect platform to facilitate online connections as well as those through the events for CVCs hosted around the world.

My hypothesis around corporate venture capital is simple – CVCs can deliver value to our portfolio companies beyond our financial investments and we are effectively paid to learn.

My team will tell you that there is nothing I enjoy more than forming a hypothesis and having a debate. This is one of the key things that makes my job as a venture investor exciting. After all, as David Hume said: "Truth springs from argument among good friends."

I welcome you to reach out to me and my team or to Global Corporate Venturing if you would like to engage in the debate.

INTRODUCTION: QUESTIONS FOR THE FUTURE

James Mawson, editor-in-chief

"The Stone Age didn't end because the world ran out of stones"
– Niels Bohr, physicist

Taking time as a snapshot of generations brings a chance to look ahead as well as see how far we have come against expectations. Futurism usually ends up saying more about the conditions and cultural mores of the time in which it was written than actually predicting the future, but as with looking at light as a wave or particle – as Bohr did – just asking the question seems to change the answer.

When George Orwell in 1949 wrote the book 1984, he took the spirit of an age defined by the Cold War. At the end of 1983, Isaac Asimov, in the Star, took on the same challenge to predict what 2019 would look like and was more optimistic.

Outside of nuclear war, "it is quite likely that society, then, will have entered a phase that may be more or less permanently improved over the situation as it now exists".

One area of hope for Asimov was "space utilisation".

"By 2019, we will be back on the moon in force. There will be on it not Americans only, but an international force of some size; and not to collect moon rocks only, but to establish a mining station that will process moon soil and take it to places in space where it can be smelted into metals, ceramics. glass and concrete – construction materials for the large structures that will be put in orbit about the Earth.

"One such structure which very conceivably, might be completed by 2019 would be the prototype of a solar power station, outfitted to collect solar energy, convert it to microwaves and beam it to Earth."

As China has landed on the dark side of the moon this year and India prepares

to land a rover there later in the first quarter, Asimov's expectation of an internationalisation of space travel has happened and more can be expected. Girish Nadkarni, head of Total's corporate venturing unit, in this year's annual GCV survey, noted outer space was a hot area for development.

This fed Asimov's hope for a globalisation of outlook to "weaken in comparison the causes that have fed the time-honoured quarrels between and within nations over petty hatred and suspicions" and "advances in technology will place tools in our hands that will help accelerate the process whereby the deterioration of the environment will be reversed".

Asimov foresaw the main tool in this as "computerisation" – or digitisation as it is more commonly regarded now judging by the GCV annual survey. Asimov said in 1983: "Computers have already made themselves essential to the governments of the industrial nations, and to world industry, and it is now beginning to make itself comfortable in the home. Those parts of the world that fall behind in this respect will suffer so obviously as a result that their ruling bodies will clamour for computerisation as they now clamour for weapons."

He was perhaps a little optimistic about the speed of change. "By the year 2019, however, we should find that the transition is about over. Those who can be retrained and re-educated will have been."

Considering the technology developments unleashed by computerisation, we are arguably still only a fraction of the way through the changes required of people.

Academic Carlota Perez, in a series of posts concluding last month reflected on aspects of Erik Brynjolfsson and Andrew McAfee's book, The Second Machine Age, and found "the impact of the information and communication technology revolution across society is only half done".

This is partly because there are still so many potential tech developments to come given the willingness of investors to fund them, at least judging by the record levels of venture dealmaking last year, according to GCV Analytics, with nearly 1,500 corporations involved in more than $180bn-worth of deals – a more than 50% increase by deal value from the year before.

News editor Rob Lavine's series on 2018 trends covered the ubiquity of the SoftBank Vision Fund, the increased willingness of unicorns to go public, and increased activity in the crypto and agriculture spaces as well as the growth of Chinese tech companies, genomics, advances in transport tech and the growth of the scooter rental space.

There was a wave of exciting breakthroughs in 2018 noted by Singularity University, including gene-edited babies, the rise of ions as a potential quantum computing architecture, solar being cheaper than fossil fuels, dextrous robots, natural language processing for machines and non-invasive brain modulation.

The annual Global Corporate Venturing survey of industry leaders uncovers a sweep of the hot areas for likely investment this year, from blockchain to artificial intelligence and through to industry 4.0 or the internet of things and on to new and better ways to treat and prevent

> What is needed now are not just policies for growth, but for a whole new direction of growth

illness and develop radical energy sources, such as fusion These deals can now be shared through the GCV Connect platform by Leadership Society members but to the whole community..

But beyond the technology changes are a host of organisational and structural developments bringing corporate venturing further into the strategic mainstream of innovation tools for executives. The blurring of private and public capital markets and financing tools is also seeing the take-up of CVC-style strategic investment approaches by corporations, led by groups such as Novo and Tencent, investing or holding stakes in the listed companies.

As private markets deepen to enable longer holding times and greater amounts to be invested in private companies so greater tolerance of risk and value creation beyond purely financial structures is starting to seep into public market investors beyond the often-crude tools of traditional activist hedge funds. This starts to turn minds on the impact of what businesses and innovation tools are trying to achieve and for whom. Risk, return and impact were increasingly the watch words of 2018 and this year will see closer attention paid to the questions this meme brings.

Thinking of the next generational leap in 35 years, brings hard questions of what technological changes will affect us and the world most. It also brings perhaps harder ones about what cultural and social changes we will be facing then. Space usage and quantum entanglement, effectively free energy and biotechnology offer utopia-dystopia-like possibilities.

Entrepreneur Aarish Shah in a GCV-moderated discussion forum said: "As for 2054, life extension leading to core shift in demography, resource utilisation and so on, the internet of us, meaning shared consciousness and an exponentially capable organic supercomputer, and the battle cry of 'make Earth great again' trumping regional, secular and commercial objectives to return equilibrium to the world.

"Or we will still be playing Candy Crush on the Northern line."

Perez in her concluding post said: "It is indeed possible that, as Brynjolfsson and McAfee assert, this revolution is different in kind to those preceding it. The potential inherent in this technology is huge. What is needed now, as I have argued elsewhere, are not just policies for growth, but for a whole new direction of growth."

She points to the environment and globalisation as "key to the demand-pull forces shaping technology and the economy in the near and further future" and wider issues for society around equality and the welfare state and the modernisation of government.

The impact of the technology is no longer as tools to help replace our physical capabilities but to augment or replace our intelligent and creative powers. As another academic, Yuval Harari, notes in his effectively three-part series, Sapiens, Homo Deus and 21 Rules for the 21st Century, the question that comes back in this era could be one of how well you know yourself in an age when machines can know you better. Or, taking Asimov's advice, on staying creative and having ideas through relaxed small groups.

Asimov said: "I do not think that cerebration sessions can be left unguided…. A session-arbiter will have to sit there, stirring up the animals, asking the shrewd question, making the necessary comment, bringing them gently back to the point."

Hacked humans, or the singularity, implies an evolutionary leap in the same way homo sapiens differed from Neanderthals – in certain conditions both could outperform, but over generations one species died out bar some intermingling of DNA.

The Anthropocene might not end officially because there are no more people, just that home sapiens has effectively evolved or created a successor with more impact.

This raises the possibility of impact. Questioning assumptions of what we invest in to create the conditions of the future also requires leadership. At the Global Corporate Venturing & Innovation Summit in Monterey, California, this month, as well as our other networking receptions, academies and conferences around the world, these leaders gather to make the world a better place.

In our annual survey of corporate venturing industry leaders, we asked what were the most important trends in 2017 and sought their insights into the big opportunities of 2018.

THE MOST IMPORTANT TRENDS OF 2018 AND THE BIG ISSUES FOR 2019

James Mawson
editor-in chief

By covering all sectors and all regions, the Global Corporate Venturing annual survey of investors is a unique snapshot of the technologies that caught the eye of venturers last year and offer potential for this year.

Artificial intelligence (AI) and blockchain shone on many investors' eyes as the big tech issues of 2018. Looking ahead reveals these developments are still being closely watched, along with interest in wider fields, from fusion power to outer space, implantable therapeutics to disease-modifying drugs.

Ultimately, as Tom Bussey at HSBC said, it is about "moving more towards emerging technologies being used to solve real problems rather than the development of technologies for no considered purpose". In this, changes in regulation and society as much as new inventions hold the key.

In alphabetical order:

Nicolas Bailleux, group innovation director at Europcar Mobility Group, said blockchain was his big tech area of interest last year.

Ran Bar-Sella, vice-president of corporate innovation at Elbit Systems and CEO at Incubit Technology Ventures, for last year said:" AI, internet-of-things sensors, automotive sensors." And this year would be AI.


Bar-Sella

Jasper Bos, new head of M Ventures, for 2018 said: "In our field, still immuno-oncology drugs, the large acquisitions in cell therapies in oncology, and the further inroads that gene therapy and RNA therapeutics are making." He added for 2019: "Alternative therapeutic modalities and disease modifying drugs."

Paulo Braga, head of corporate venture at Eurofarma, said: "There were a couple of exciting technologies in 2018, but artificial intelligence and big data played a big role this past year, especially in the healthcare ecosystem." He added for 2019: "Healthtechs and digital therapies, especially the ones using AI to make easier, faster and cheaper treatments and diagnostics. We are in an imminent disruption phase within the sector and with great changes comes great opportunities."


Braga

Laurel Buckner, senior vice-president and managing director at ATN Ventures, for 2018 said: "AI, machine learning, hybrid cloud, 5G's promise and beginning debut of high bandwidth low-latency networks."


Buckner


Bussey

Tom Bussey, investment manager at HSBC Ventures, for last year said: "Moving more towards emerging technologies being used to solve real problems rather than the development of technologies for no considered purpose – the application of these technologies to specific problems should make for an exciting 2019." In addition, he added this year: "Changes in regulation often drive innovation – I am keeping a close eye on opportunities driven by open banking."


Cannestra

Tony Cannestra, director of corporate ventures at Denso, last year said: "The continued rise of semiconductor startups trying to solve the deep learning, machine learning and AI computer power issue." This year he added: "New mobility and advanced transportation; shakeup of startups in the industry will begin."

Tim Chater, executive partner at Pilot Lite Ventures, said: "Emergence of AI into mainstream" in 2018 was the big issue and AI would again be for 2019.


Cheng

Ann Cheng, senior investment manager at Hyundai Motor's Cradle, said AI was important in 2018, while adding blockchain for 2019 on top.

Andrea Course, principal at Schlumberger Technology Investments, for last year said: "Clean tech, internet and things and energy transition technologies." She added for 2019: "I think the trend will keep on growing on trying to find technologies that will allow us to innovate and optimise our current processes." While her colleague, **Jennifer Grigel**, added that edge computing, security, digital twins were 2018's big issues and IoT-enabled applications would be for 2019.


Course

Peter Cowley, head of Marshall's Martlet corporate angel fund, for last year said personalised medicine was his choice of tech, while also having concerns about the "worrying increase in hype of initial coin offerings (ICOs), crypto and blockchain". This year he expected: "ICOs are regulated out of existence – although that make take longer. Better deals if anticipated global downturn starts."


Cowley

Dirk De Boever, head of investments at Finindus, said AI dominated 2018 while industry 4.0 would do so in 2019.

Victoria De La Huerga, vice-president at Archer Daniels Midland's ADM Ventures, last year picked "digital everything, Amazon Go, big data and AI," while 2019 would see opportunities for cannabis and hemp.


Defert

Christophe Defert, vice-president of Centrica Innovations, for last year said: "Everything as a service." This year he has "AI and autonomous technologies beyond mobility" as the main issue.

Michaela Dempsey at Scout RFP, for last year said: "Advancement in machine learning's intelligent analytics, internet of things and virtual reality." She added for this year: "Advancing machine learning as there is no AI without advancing this step. IoT is already out there and needs to be maximised."


De Winter

Michael Dolbec, executive managing director at GE Ventures, said AI and edge computing were important in 2018 and would be again this year. His colleague, **Alex de Winter**, added: "Widespread application of blockchain and AI" in 2018 and AI for clinical decision support, precision medicine for 2019.

Lara Druyan, managing director and head of innovation for the west coast US at Royal Bank of Canada, said: "AI is now being used to solve tangible problems and create value for customers, especially in financial services. Previously, many of the companies felt like technology in search of problems to solve." She added that for 2019: "AI will continue to be an important area. So will next generation architecture as the enterprise continues to be ripped and replaced."

Matthieu Eyries, managing direct at Air Liquide Group's Aliad corporate venturing unit, said last year;s trends were digital health and smart cities, while air quality and foodtech were the ones to watch in 2019.

Hélène Falchier, head of private equity and CEO of Open CNP at CNP Assurances, said AI was important in 2018, while "AI and maybe blockchain" would be in 2019.


Fischer

Albert Fischer, co-owner at Yellow&Bue FS and formerly with Nuon, for last year and this said: "Energy storage in the broadest sense."

Guenia Gawendo, innovation investments and scouting director at Telefónica, said edge computing was driving last year and this year, while **Miguel Arias, global entrepreneurship director** at Telefónica, said blockchain, AI applied to enterprise and the internet of things.

William Germain, former private equity investment professional at M&G's Infracapital now at Techstars, said for 2018: "Data analytics, artificial intelligence, re-engineering technologies." For 2019 he added: "Automated platforms and services across a range of sectors – leveraging technologies such as data analytics and artificial intelligence."


Gogolev

George Gogolev, general manager at Severstal Ventures, for last year said "material informatics".

David Goldschmidt, vice-president and managing director at Samsung Catalyst Fund, for last year said AI, while this year would be more about blockchain-related tech.

Scott Gunther, director of commercial development at IAG's Firemark Ventures, said computer vision drove last year and this year in tech.


Hollins

Brian Hollins, growth equity investor at Goldman Sachs, said: "Prescriptive analytics, sales enablement, robotics process automation." For 2019 he added: Continuous data protection, edge computing, genomics."

Amir Kabir, principal at Munich Re Ventures, for last year said: "Artificial intelligence, especifically neuro-lingusitic programming, semantic analysis, robotics process automation and bots.


Kabir

Ankur Kamalia, managing director and head of venture portfolio management at Deutsche Boerse's DB1 Ventures, for last year said: "Digital asset infrastructure build. Data privacy issues." He added "platform expansion, digital assets, enterprise fintech" for 2019.


Kamalia

George Kellerman, new CEO of Yamaha Motor Ventures, said: "The rise of vertical take-off and landing for autonomous aerial commuter vehicles" was last year's big issue. And agricultural robotics and automation would be the tech for 2019.

David Kingham, executive vice-chairman at Tokamak Energy, said private investment in fusion energy last year would mean we are "on the cusp of a big breakthrough" in 2019.

Florian Kolb, managing director of Innogy New Ventures, said data interoperability was last year's issue, leading to "data-driven business models" in 2019.

Jon Koplin, managing director at Cisco Investments, said blockchain, AI and machine learning. For 2019 he added supply chain.

Axel Krieger, managing director and founding partner at Digital-plus Partners, said AI last year and "applied AI" this year.

Patricia Kroondijk, strategy manager at Financial Innovation Lab–Hitachi America, said machine learning, blockchain, robotics process automation were last year's big issue.

Shashi Kumar, mentor at Group Sunkyoung (SK) Group, said mobility was the core tech for both last year and this year.


Letalik

Ben Letalik, innovation and ventures at TD, said: "Artificial intelligence, data privacy" for 2018 and "segment-specific, vertically integrated solutions" this year.

Bo Liu, principal for venture investments at JJDC in Shanghai, China, said AI was last year's big issue. His colleague in Boston, US, **Marian Nakada**, added, for 2018: "Cell therapy for oncology and gene therapy for a range of diseases." She added for 2019: "Breakthrough data sciences approaches to elevating R&D effectiveness."


Nakada

Wikings Machado, director at Siemens' Next47, for 2018 said: "There is great opportunity in the deep technologies that are fuelling fundamental changes across all industries. Examples of these technologies are autonomous vehicles, artificial intelligence, internet of things and additive manufacturing." For 2019 he added: "In my role leading our business development efforts in the US, I see huge opportunities to be a catalyst for growth for any company by bridging the gap between their game-changing technologies and the leaders of the industries that can benefit from them most."


Machado

Ashish Mahashabde at American Express Ventures for last year said: "Autonomous systems moving beyond the hype and entering the 'trough of disillusionment'." He added for 2019: "Deep learning, edge computing, computer vision."


Makkar

Pankaj Makkar, head of Bertelsmann India Investments, said mobility and electric vehicles drove 2018, while adding fintech as well as mobility for 2019.


Miner

Jack Miner, managing director at Cleveland Clinic Ventures, for 2018 said AI.


Nadkarni

Girish Nadkarni, president at Total Energy Ventures, for last year and this said: "Artificial intelligence and outer space-related technologies like geospatial analysis." He added internet of things for 2019.

Hirokatsu Nakayama, investment director at Omron Ventures, said the increasingly cashless economy was important, while tech out of Israel would be significant in 2019.

Masa Nishikawa, president at Kanematsu Ventures, said autonomous driving was important last year and cybersecurity would be this year.


Palcheck

Tony Palcheck, managing director at Zebra Technologies, for last year and 2019 said: "To me, there were the three As – automation, analytics and artificial intelligence."

Agustina Palmai, corporate development at Mercado Libre, for last year said: "Fresh delivery and digital payments solutions." While "logistics solutions" was the tech to watch for 2019.


Peck

Sebastian Peck, managing director of InMotion Ventures for Jaguar Land Rover, said micro-mobility drove last year, while "all things mobility" would dominate this year.

Maria Peterson at JSR Micro, said quantum computing was important last year and AI would be in 2019.


Pitz

Andrew Pitz, investment manager at Transamerica Ventures, for last year said: "Continued development of AI and machine learning – the real use cases, not the hype – but also crypto and blockchain use cases starting to be figured out." For 2019 he added: "Tokenisation of real-world assets. Can bring liquidity to illiquid markets and can develop new derivatives markets."


Prunier

Rémi Prunier, investment manager at Orange Digital Ventures, for last year said: "Artificial intelligence and privacy – thanks to General Data Protection Regulation. Edge computing and augmented analytics might be among the biggest investment opportunities in 2019."

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bp ventures

Rajesh Ramanujam, emerging business investments at Lam Research Capital, for 2018 said artificial intelligence.

Mark Richey, venture partner for Medical Growth Fund at BioEnterprise, for last year said: "Social determinants of health and the application of machine learning and AI in directing intervention services and programs for optimal outcomes." This year he said it would be "data lab and data science services".


Riley

Don Riley, venture executive at Chevron Technology Ventures, said: "The two most impactful trends in 2018 are the widening use of machine learning and corporate digital transformation." He added for 2019: "Carbon capture, sequestration and reuse."

Philipp Rose, managing director at Robert Bosch Venture Capital, said quantum computing was a big issue last year while "AI, future mobility, deep tech" would be this year's.

Jamie Rutledge, director and head of technology scouting, external research and strategic technology investments at Dyson, for last year said: "The various implementation of AI in the corporate environment for efficiency and augmentation." He added for this year: "The various uses of blockchain – note Bitcoin – in conjunction of AI and robotics in the supply chain."

Craig Schedler, venture partner at Northwestern Mutual Future Ventures, said: "Increased use of robotics process automation and continued growth of AI. For 2019 he added: "Investments in serving the population and digital health."


Seiffert

Peter Seiffert, head of Embraer Ventures, said blockchain was the big technology for last year and AI would be in 2019.

Raj Senguttuvan, emerging business and partnerships at Analog Devices' Analog Garage, for last year said genomics, AI, bio-sensors and autonomous vehicles, while industry 4.0 technologies, augmented and virtual reality, bioengineering and AI would factor this year.


Simi

Bonny Simi, president at JetBlue Technology Ventures, for last year said: "The evolution of the electric vertical take-off and landing vehicle also known as air taxi. In 2017 there were only 20 companies with public information about their efforts, and as of October 2018, there are over 100." For 2019 she added: "Blockchain, AI and machine learning will start providing significant investment opportunities."

Marc Sluijs, founder of DigitalHealth.Network, said digital therapeutics was the big technology for last year and would be again in 2019.


Sobajima

Kenyu Sobajima, head of at KDDI Open Innovation Fund, said artificial Intelligence was important last year and would be again this year.

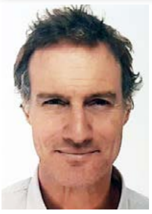
Vinay Solanki, head of Commercial Growth Fund at Channel 4, for 2018 said: "Continued consumer adoption."


Solibieda

Markus Solibieda, managing director at BASF Venture Capital, for last year said: "The advancements in 3D-printing technology." He added for this year: "Agtech, 3D printing, platform business models." His colleague, **Han Qin, investment manager**, for 2018 said AI, big data, machine learning and business-to-business platforms for this year.

William Taranto, president at Merck Global Health Innovation Fund, for 2018 said: "The advancement of AI in healthcare. We now see the beginning of true personalised medicine." But for this year he added: "Body sensor monitoring in healthcare is at a point where the technology is so advanced and the data is so rich that it is still a hot area."


Taranto


Thurn und Taxis

Philipp Thurn und Taxis, founder and CEO of Constantia New Business Capital, sister company of Constantia Industries, said artificial intelligence was important last year, while "investing against the current as the tide goes out" would drive 2019.

Fumiko Uraki, deputy general manager at Mitsubishi Chemical Holdings, said cryptocurrency was the big technology for last year and data security would be in 2019.

Brad Vale, founder of Strategic Healthcare Investment Partners, said blockchain was 2018's big issue.


Vale


Waite

Rita Waite, manager at Juniper Networks, for 2018 said: "AI continues to be an important trend in the market. We are seeing increasingly more use cases that drove value from the technology. We need to build the infrastructure to support it."

John Wei, senior investment manager at Sabic Ventures, said digital was the big technology for last year and would be again in 2019.

Mitchell Weinstock, partner at HP Tech Ventures, for 2018 said machine learning, while his partner, **Angelo Del Priore**, added: "Blockchain not. Actually, its crash is a great reminder for the need of real value to sustain a trend." He added for 2019 that productised AI would be the area to watch.


Wilkinson

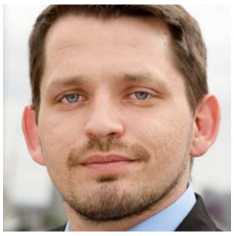
Jim Wilkinson, chief financial officer at Oxford Sciences Innovation, said digitisation dominated in 2018, while AI would in 2019.

Yannick Willemin, head futurist at SGL Group, said: Additive manufacturing and material functionalisation were 2018's big issues but sensors and actuators with the underlying technologies would be key to 2019.

Ben Wright, director at 3M Ventures, for 2018 said machine learning and AI.

Blockchain's crash is a great reminder for the need of real value to sustain a trend

THE ANNUAL REVIEW: CORPORATE VENTURING HITS A NEW HIGH



Kaloyan Andonov, reporter and data analyst

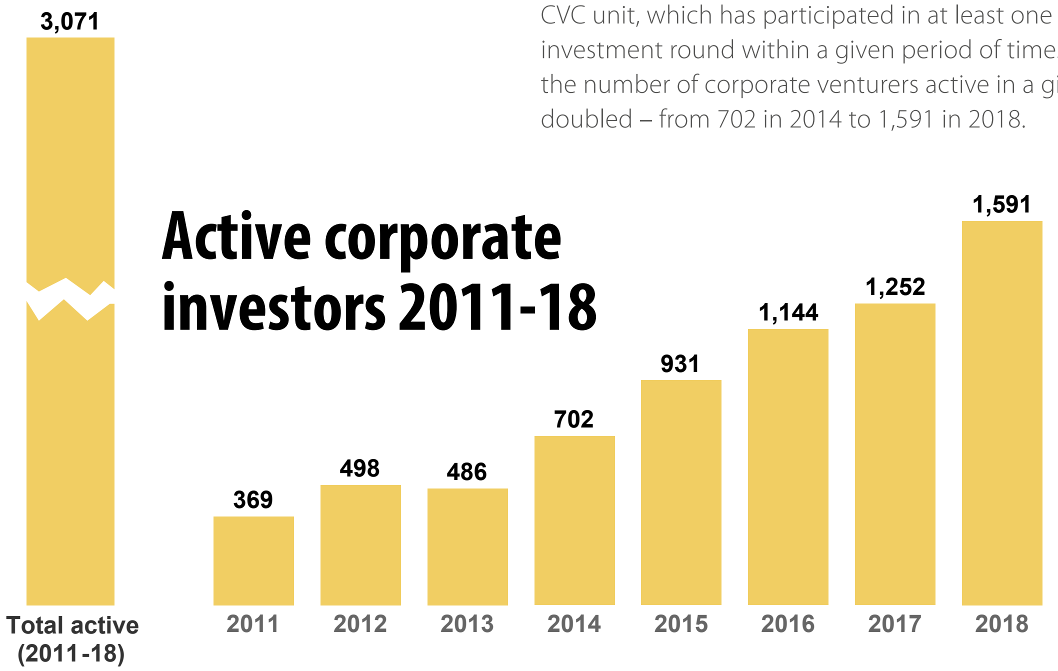
In 2018 GCV Analytics tracked 2,775 deals worth an estimated total of $180.17bn. While the number of deals increase significantly (14%) on a year-on-year basis compared with the 2,427 transactions reported in 2017, the total value of corporate-backed VC rounds grew by 55% to new all-time high.

While more deals involving corporate backers have been conducted around the globe, the growth of total estimated capital appears to have been pushed by larger valuations– the number of deals has increased by 60% since 2014 (1,732), while the total value has almost quadrupled. This, along recent downward trends in stock markets around the world, are raising questions about whether we are reaching the peak of the expansion phase of the business cycle and whether we will soon be heading into a trough.

Such a slump could drive the valuation of emerging businesses down. The caveat is, however, that economic conditions may also be taxing on the operations and viability of some businesses, which can drive startup death rates up. For corporate venturers, a downturn could generate opportunities to buy promising businesses at a discount, provided, of course, that corporate parents continue to see value in the optionality, market intelligence and the ecosystem building functions they provide.

Should a new recession hit, it may well fall on CVC executives to justify the value they provide to their boards and the corporate C-suite. Thus, it may well be incumbent on the corporate venturing community to start relaying the message that corporate venturing is valuable and a downturn may be the best time to follow the age-old maxim of buying low to sell high later.

Corporations around the globe have seen much value from venturing. The growth of the number of active corporate venturers over the years is evidence of this. Since 2011, when our publication was launched, GCV has tracked more than 3,000 corporate investors, according to our broad definition – any corporate investor, with or without a specialised CVC unit, which has participated in at least one minority stake investment round within a given period of time. We also observed that the number of corporate venturers active in a given year has more than doubled – from 702 in 2014 to 1,591 in 2018.

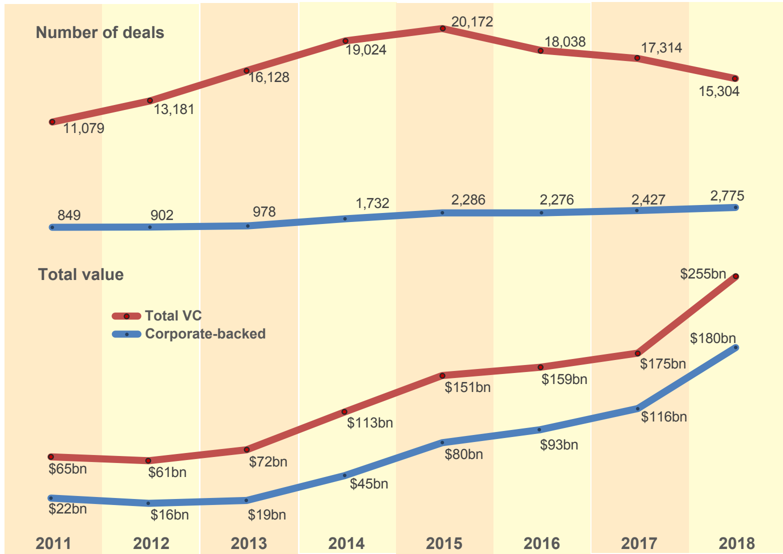


According to PitchBook Data, a provider of private capital market data, the number of venture capital deals has been decreasing over the past four years – from 20,172 deals in 2015 to 15,304 in 2018. However, the number of deals involving corporate venturers has remained largely unaffected – relatively stable at above 2,000 transactions over the same period and increasing again last year. Moreover, the overall corporate share of venturing activity has increased significantly from 8% in 2011 to 18% in 2018 due to the growing number of corporates taking minority stakes in deals.

The story is quite different when told in terms of the values involved in corporate-backed rounds. Data from both PitchBook and GCV Analytics show that the growth of total capital deployed in corporate-backed rounds has parallelled the growth in capital deployed in all venture rounds.

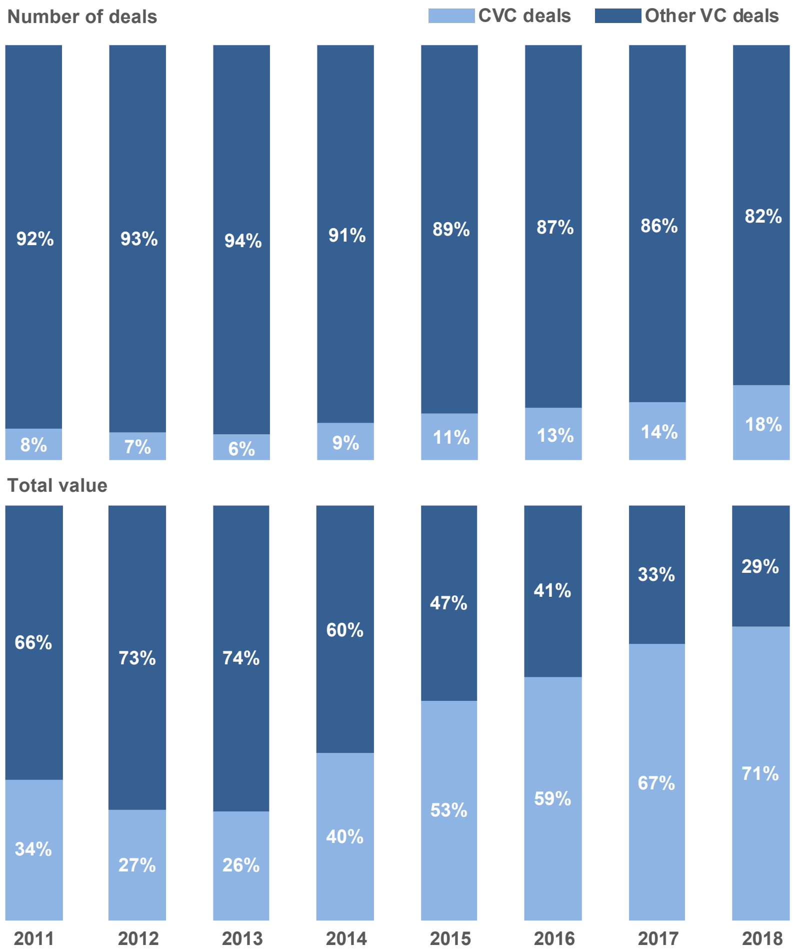
However, the growing influence of corporates in syndicates has been obvious since 2014, the same year total venturing dollars began to rise – to $113bn from $72bn the previous year. As a percentage of the total commitment to VC rounds, the capital in corporate-backed transactions rose from 26% in 2013 to 71% in 2018 as corporate venturers have become increasingly involved in the funding rounds of emerging companies with higher valuations.

Corporate-backed deals as part of total global venture capital 2011-18



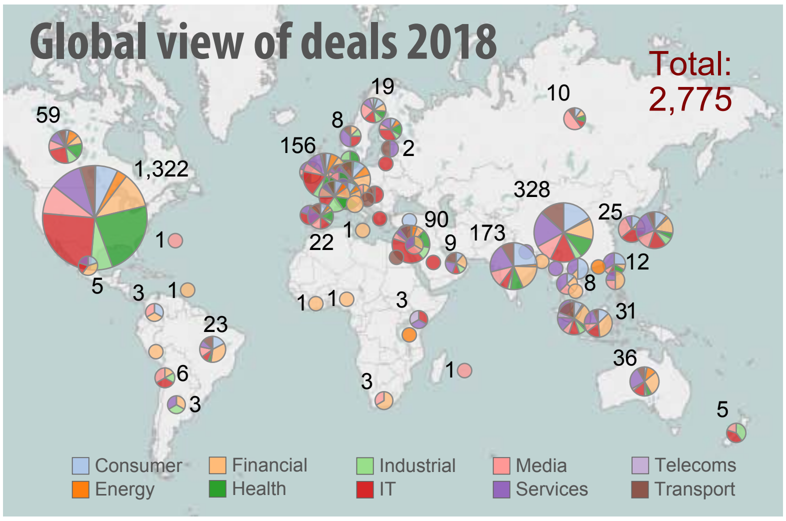
Sources: PitchBook & GCV Analytics

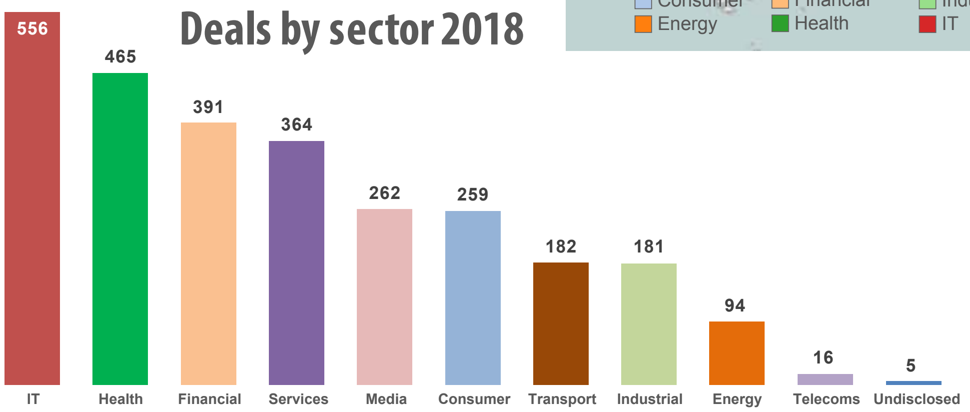
Share of CVC deals among total venture capital deals 2011-18



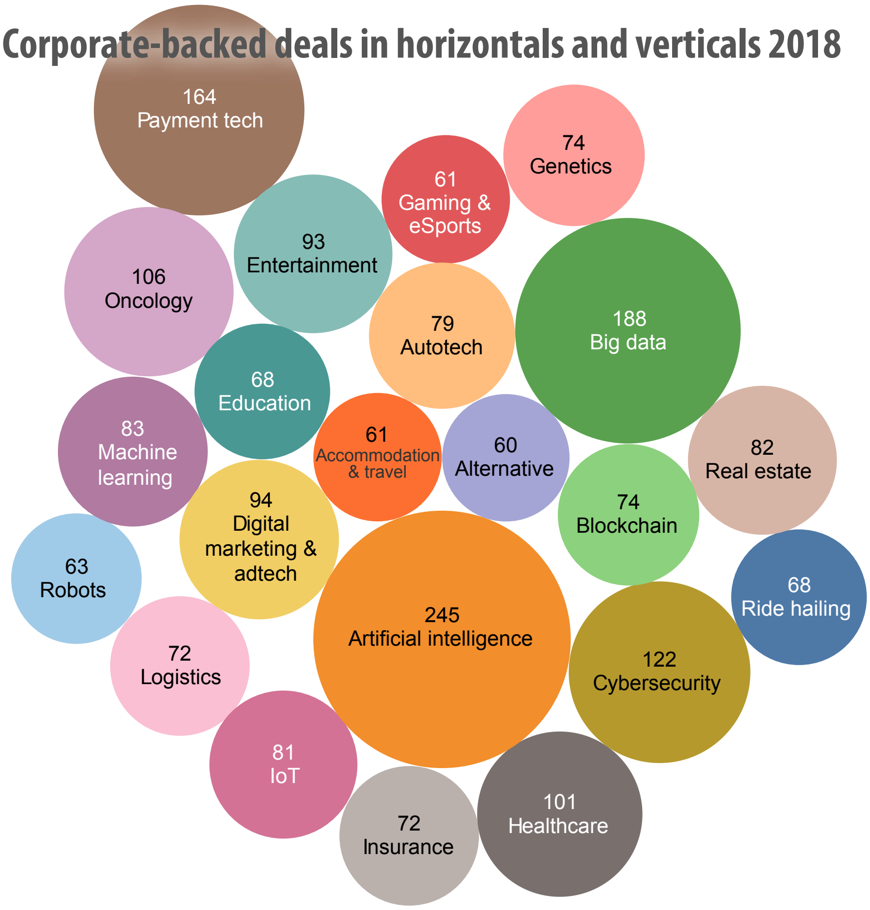
Sources: PitchBook & GCV Analytics

Nearly half of all tracked corporate-backed transactions in 2018 took place in the US (1,322). Other notable innovation geographies on the global scene were China (328), India (173), the UK (156), Israel (90) and Canada (59).



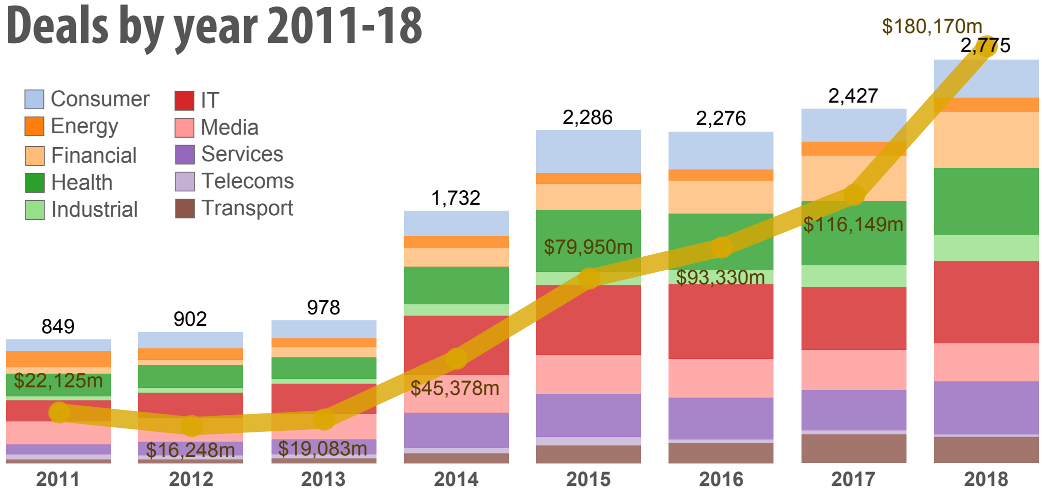


Emerging businesses from five sectors raised the largest number of corporate-backed rounds – IT with 556 deals, health with 465, financial services with 391, business services with 364, media with 262 and consumer with 259. These figures do not necessarily coincide with the sectors that have drawn most attention in the media or raised most capital.

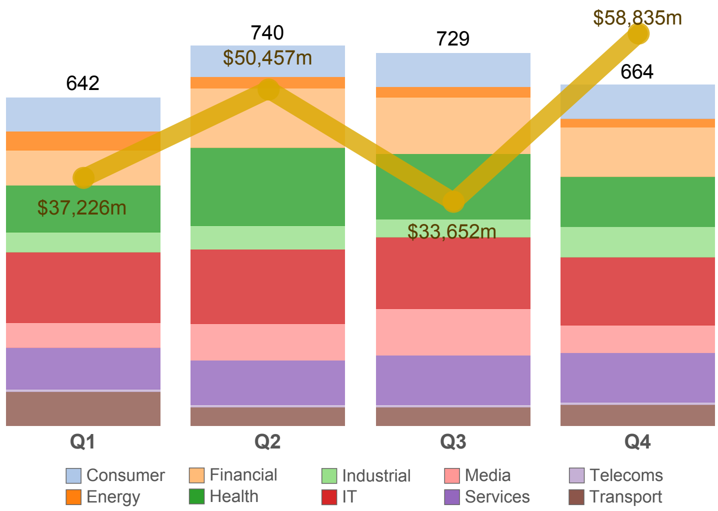


In terms of investment verticals and horizontals, artificial intelligence (AI) along with machine learning, big data, payment tech, cybersecurity, cancer treatment and healthcare IT, drew the most attention and interest of corporate venturers.

Deals by year 2011-18



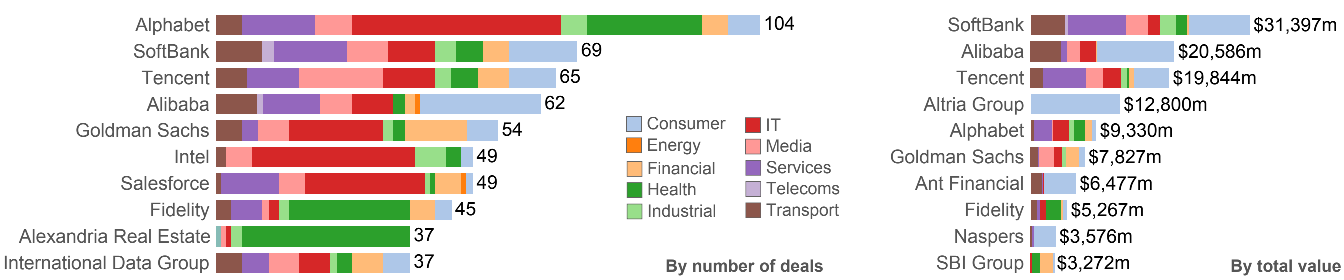
Deals by quarter 2018



Looking at 2018 on a quarterly basis, the deal count rose from 642 in the first quarter to 740 transactions in the second, plateaued at 729 transactions in the third and slid back to 664 deals in the fourth. In terms of total value, there was a clear upward trend during the second and the fourth quarter, which registered the highest figures at that time involved in corporate-backed rounds per quarter, at $50.46bn and $58.84bn.

As in the previous year, US and Asia-based investors were the top corporate investors in 2018 – diversified internet conglomerate Alphabet with 104 deals, telecoms company SoftBank with 69 investments, internet company Tencent (65), e-commerce firm Alibaba (62), financial services firm Goldman Sachs (54), semiconductor manufacturer Intel (49) and cloud service provider Salesforce (49), among others. The top three investors involved in the largest rounds were SoftBank, Alibaba and Tencent, although Altria joins the top 10 by value of deals conducted by virtue of its large investment for a minority stake in e-cigarette maker Juul.

Top investors 2018



A VIEW FROM WITHIN

The corporate investing landscape continues to rapidly evolve. The range of options has expanded to include a multitude of approaches, from venture investing to incubators, accelerators, and various open innovation models. In order to succeed, venturing and innovation groups must be aligned with the business while also retaining a level of freedom - remaining insulted but connected. Hear the perspective and insights from a C-suite executive of a major regional retailer and former CMO of BP on why this is critical, and how it enables the delivery of real value to the core and new growth, all while navigating enormous disruption.

At Clareo, we are a passionate group of experienced leaders focused on helping clients develop new ways to grow the core and adjacencies and create new businesses, giving them the plans and capabilities needed to get there. We also bring deep expertise and proven methods in strategy and operating models for the design and launch of internal and external corporate venturing groups.

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Managing Partner, Clareo

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Top 10 corporate venturing investments 2018

Portfolio company	Location	Sector	Round	Round size	Investors
Juul Labs	US	Consumer	Stake purchase	$12.8bn	Altria Group
Ele.me-Koubei	China	Consumer	–	$4bn	Alibaba | Ant Financial | Primavera Capital | SoftBank
Bytedance	China	Media	–	$3bn	General Atlantic | KKR | Primavera Capital | SoftBank
WeWork	US	Services	Stake purchase	$3bn	SoftBank
Ofo	China	Transport	Stake purchase	$3bn	Alibaba
Pinduoduo	China	Consumer	–	$3bn	Sequoia Capital | Tencent
JD Logistics	China	Services	–	$2.5bn	China Development Bank | China Life Insurance | China Merchants Group | China Structural Reform Fund | Hillhouse Capital Management | ICBC International | Sequoia Capital | Tencent | undisclosed investors
GM Cruise Holdings	US	Transport	–	$2.25bn	SoftBank
Beijing Easyhome Furnishing Chain Store Group	China	Consumer	–	$2bn	Alibaba | Harvest Capital Management | Taikang Life Insurance Company | Yunfeng Capital
Coupang	South Korea	Consumer	Stake purchase	$2bn	SoftBank

Deals

GCV Analytics tracked many large deals through 2018. All the top deals were well above $2bn. These sizeable rounds were raised mostly by emerging businesses in consumer-oriented businesses such as food delivery and bicycle rentals, as well as in logistics, autonomous automotive technologies and other areas. The most consistent corporate backers of these top rounds were Alibaba, Tencent and SoftBank.

Cigarette manufacturer Altria Group paid $12.8bn for a 35% stake in e-cigarette maker **Juul Labs**. The transaction valued the company at $38bn. The stake purchase reportedly gave hedge fund manager Tiger Global Management a $1.6bn dividend, while Juul's employees were said to have received some $2bn through the deal. The company had declined Altria's initial approach in early 2018, when it proposed acquiring Juul at a valuation of approximately $5bn. Juul was formed by vaporiser producer Pax Labs in 2015 to make e-cigarettes before being spun off two years later. It sells its products online and in convenience stores and vape shops.

Ele.me and **Koubei**, the merged local services subsidiaries of Alibaba, raised $4bn at a $30bn valuation from investors including SoftBank, which provided its share of the funding through the SoftBank Vision Fund, joining Alibaba and its financial services affiliate Ant Financial as well as private equity group Primavera Capital. The capital was provided to support the merger of Ele.me, the portfolio company Alibaba acquired at a $9.5bn valuation, and Koubei, the Alibaba spinoff that had secured $1.1bn from investors at an $8.8bn valuation. The merged company will provide mobile users with access to a wide range of local services including retail, food delivery, travel and accommodation.

China-based digital media company **Bytedance** raised $3bn from investors including SoftBank at a $75bn valuation. Growth equity firm General Atlantic and investment firms KKR and Primavera Capital Group also took part in the round. SoftBank had reportedly intended to invest $1.8bn in the round, depending on whether secondary shares were available. Bytedance's best known property is news aggregation app Toutiao, which had 120 million daily active users as of the start of 2018, but it also runs short-form video platform TikTok, which has more than 500 million monthly active users, and photo modification app Faceu. The company has recently launched additional products, such as budget e-commerce platform Zhidian and social commerce app Xincao.


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The SoftBank Vision Fund invested $3bn in one of its biggest portfolio companies, US-based workspace provider **WeWork**, which agreed to receive the first $1.5bn in January 2019 and the other half in April in the form of warrants that give the Vision Fund the opportunity to buy WeWork stock at $110 a share or higher by September. Founded in 2010, WeWork oversees a network of flexible workspaces in more than 30 countries across five continents which are leased from landlords and rented to businesses or individuals by the desk or office. It is also branching out into managing housing, leisure and educational spaces.

Alibaba bought $3bn worth of shares in China-based bicycle-rental platform **Ofo** from investor Allen Zhu. Alibaba reportedly acquired the shares at a $10bn valuation though the stake was probably held by GSR Ventures, a venture capital firm that backed Ofo at series A, B and C stage at which Zhu is managing director. Founded in 2014, Ofo runs an app-based rental platform that had 200 million registered users worldwide at the end of 2017. It has 10 million bikes in service across 250 cities in 22 countries.

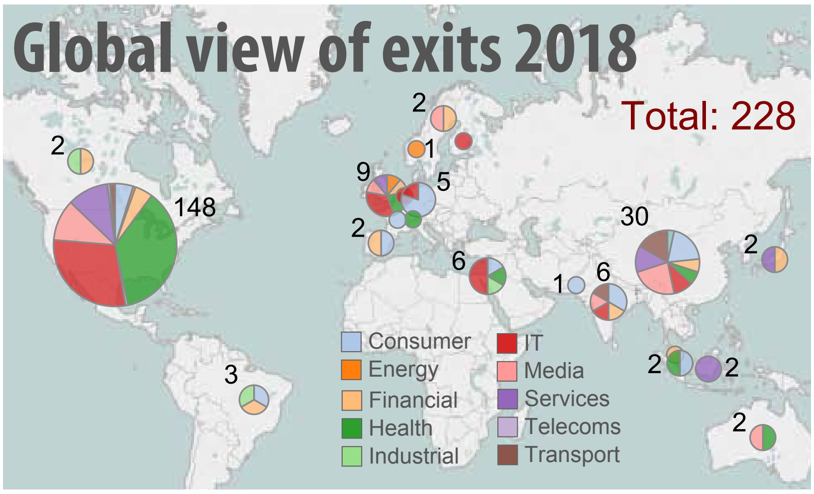
China-based online group buying platform **Pinduoduo** closed a reported $3bn round led by Tencent. Venture capital firm Sequoia Capital is also said to have participated in the round, which valued Pinduoduo at $15bn. Founded in 2015, Pinduoduo operates an e-commerce offering that allows the use of social media platforms such as Tencent's messaging service WeChat to share details of products they want to buy, and to form purchasing groups to secure discounts on products such as food, cosmetics and babycare. It has reportedly attracted 300 million users to date. The company also raised an initial public offering last year, as reported later in this article.

JD Logistics, the logistics spinoff of China-based e-commerce firm JD.com, raised funding from investors including Tencent and insurer China Life in a $2.5bn round. JD Logistics was formed in 2017 out of a logistics operation its parent had been running for a decade. It has seven fulfilment centres and more than 400 warehouses, which it claims represents the largest fulfilment infrastructure of any China-based e-commerce firm. The company's services cover deliveries and cold chain logistics.

SoftBank agreed to provide $2.25bn for **GM Cruise Holdings**, an autonomous driving spinoff of automotive manufacturer General Motors. The SoftBank Vision Fund agreed to co-invest with GM, which provided $1.1bn of the total. The transaction gave SoftBank a 19.6% stake in GM Cruise. Cruise is developing autonomous vehicle technology for GM's Bolt range of electric vehicles. The technology is expected to reach the market later this year. The company was formed in 2013 and GM paid $1bn to acquire it in early 2016.

Alibaba paid about $857m for a 15% stake in China-based furniture retailer **Beijing Easyhome Furnishing Chain Store Group** as part of a RMB13bn ($2.04bn) round which also featured insurance firm Taikang and private equity firms Yunfeng Capital and Harvest Capital, the last reportedly investing $228m. In addition to its investment, Alibaba will assist EasyHome in digitising its business, supplying insight into consumer habits, the cloud and enterprise technology together with its logistics resources and membership scheme. Founded in 1999, EasyHome operates a chain of 223 stores in 29 Chinese provinces and municipalities, selling furniture, and home improvement and building materials. It also provides home design and renovation services.

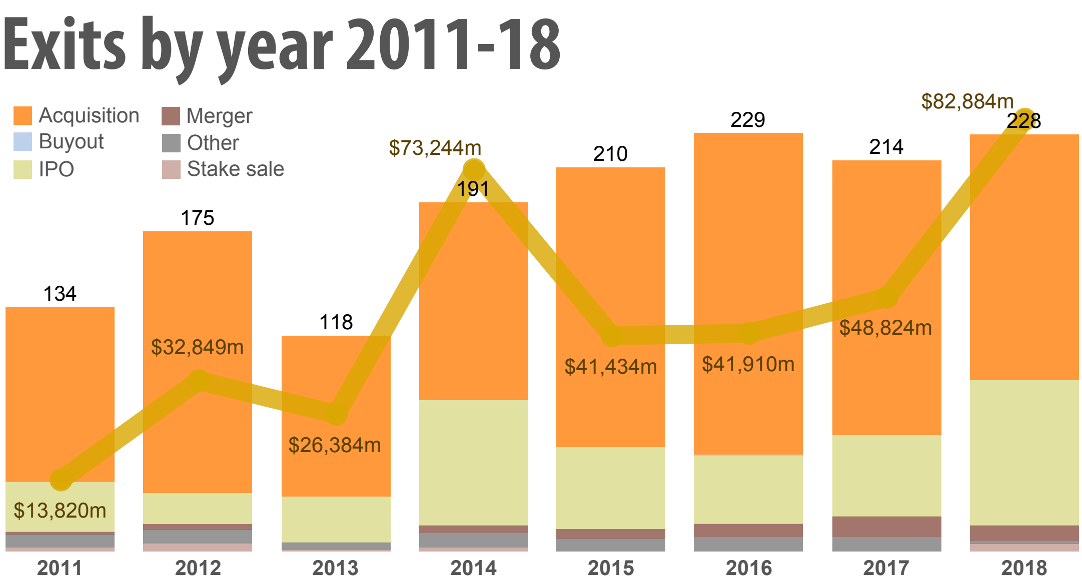
SoftBank agreed to invest $2bn in South Korea-based e-commerce platform **Coupang** through the SoftBank Vision Fund, reportedly at a valuation of $9bn. Coupang operates an online marketplace that lists more than 120 million products for sale, 4 million of which are available for one-day delivery through Rocket, its end-to-end fulfilment system, which delivers a million parcels a day. The company had more than doubled its revenue in the past two years. The funding will support a strengthening of Coupang's technology capabilities, as it looks to cut delivery times while introducing features such as an artificial intelligence-equipped product recommendation system and a one-touch payment option.



Exits

GCV Analytics tracked 228 exits involving corporate venturers and companies backed by corporates. This was a 7% increase over the previous year's 214. The US hosted nearly two-thirds (148) of these transactions, followed by China (30). The total estimated capital involved in the exits was $82.88bn, a 70% increase over the $48.82bn in 2017. Most of the top exits in 2018 were acquisitions and stake sales.

Retail group Walmart closed its record-breaking $16bn acquisition of a 77% stake in India-based online marketplace **Flipkart**, enabling SoftBank and e-commerce company eBay to exit. The deal valued Flipkart at about $20.8bn. Although some of investors, including SoftBank and eBay, exited entirely, other investors, such as Tencent, software provider Microsoft and investment firm Tiger Global Management retained their stakes. Tencent and Tiger Global also kept their board seats. Flipkart runs an e-commerce platform that lists more than 80 million products in about 80 categories, including electronics, appliances, clothing and home goods. It also owns fashion e-commerce subsidiaries Myntra and Jabong as well as payment app PhonePe.



Top 10 corporate venturing exits 2018

Portfolio company	Location	Sector	Exit type	Acquirer	Exit size	Investors
FlipKart	India	Consumer	Acquisition	Walmart	$16bn	Accel Partners | Baillie Gifford | Bennett Coleman & Company | DST Global | GIC | Greenoaks Capital | Iconiq Capital | International Data Group | Morgan Stanley | Naspers | Qatar Investment Authority | Sofina | SoftBank | Steadview Capital | T Rowe Price | Tencent | Tiger Global Management
Tencent	China	–	Stake sale	–	$9.8bn	Naspers
Xiaomi	China	Consumer	IPO	–	$4.72bn	All-Stars Investment | China Mobile | CICFH Entertainment | DST Global | GIC | Hopu Fund | International Data Group | Morningside | Nokia| Qiming Venture Partners | Qualcomm | SF Express | Temasek | Yunfeng Capital
Meituan-Dianping	China	Consumer	IPO	–	$4.2bn	Canada Pension Plan Investment Board | Capital Today | China Structural Reform Fund | China-UAE Investment Cooperation Fund | Coatue | Darsana Capital Partners | DST Global | GIC | Hillhouse Capital Management | International Data Group | Lansdowne Partners | Oppenheimer Funds | Priceline | Sequoia Capital | Tencent | Tiger Global Management | TrustBridge Partners
Ele.me	China	Consumer	Merger	Alibaba	$3bn	Alibaba | SoftBank
Mobike	China	Transport	Acquisition	Meituan-Dianping	$2.7bn	Bertelsmann | Bocom International | Ctrip.com | Farallon Capital Management | Hillhouse Capital Management | Hon Hai | Huazhu Hotels Group | ICBC International | Joy Capital | Panda Capital | private investors | Qiming Venture Partners | Sequoia Capital | Temasek | Tencent | TPG | Warburg Pincus
Duo Security	US	IT	Acquisition	Cisco Systems	$2.35bn	Alphabet | Benchmark | Geodesic Capital | Index Ventures | Lead Edge Capital | Meritech Capital | Radar Partners | Redpoint Ventures | Resonant | True Ventures | Workday
Izettle	Sweden	Financial services	Acquisition	PayPal	$2.2bn	American Express | Creandum | Dawn Capital | Fourth Swedish National Pension Fund | Greylock Partners | Hasso Plattner Ventures | Index Ventures | Intel | Mastercard | Northzone | Santander | SEB | Victory Park Capital | Zouk Capital | undisclosed investors
Flatiron Health	US	Health	Acquisition	Roche	$1.9bn	Allen & Company | Alphabet | Baillie Gifford | Casdin Capital | First Round Capital | Great Oaks Venture Capital | IA Ventures | Laboratory Corporation of America | Social&Capital | SV Angel
Pinduoduo	China	Consumer	IPO	–	$1.63bn	Cathay Capital | Gaorong Capital | International Data Group | Lightspeed Venture Partners | Sequoia Capital | Sky Royal Trading | Sun Vantage Investment | Tencent

Media and e-commerce firm Naspers sold HK$76.95bn ($9.8bn) of shares in **Tencent**, in which it had been an early investor since 2011. Naspers had acquired a 46.5% share of Tencent through its $32m investment three years before its IPO in Hong Kong. The company sold 190 million shares – a 2% stake – at HK$405 a share. The share price fell 4.5% in Hong Kong when the transaction took place. Though the price has since recovered, Naspers pledged in a statement not to sell more Tencent shares in the next three years. Tencent operates a large-scale online services offering centred on its messaging app, WeChat, which has more than 1 billion users. As of the fourth quarter of 2017 it was the fifth most valuable company in the world, with a market capitalisation of about $505bn at the time of the transaction.

China-based consumer electronics producer **Xiaomi**, which counts mobile semiconductor maker Qualcomm as an investor, raised $4.72bn in its IPO, after pricing roughly 2.18 billion shares at the low end of the HK$17 to HK$22 range it had previously set, valuing Xiaomi at about $54bn. The offering was originally intended to be a dual offering raising up to $10bn, but Xiaomi was forced to drop the Shanghai portion, reportedly after failing to answer several questions set by Chinese regulators. Founded in 2010, Xiaomi designs and manufactures smartphones as well as other electronic devices, such as smart home products, tablets and televisions which are connected through its MIUI operating system. It made a RMB43.8bn net loss in 2017 from revenues of RMB115bn.

China-based local services platform **Meituan Dianping** raised $4.22bn in an IPO that included a $400m investment by Tencent. Meituan Dianping issued 480 million primary shares on the Hong Kong Stock Exchange at HK$69 each, near the top of the IPO's HK$60 to HK$72 range. The offering valued the company at about $52bn. Tencent was joined as a cornerstone investor in the IPO by asset manager Oppenheimer, which bought $500m of shares. Established in 2015 through a merger of group buying platform Meituan and restaurant listings service Dianping, Meituan Dianping now operates an online portal that links to a range of services including food delivery, travel booking and event ticketing.

Alibaba merged online food delivery subsidiary **Ele.me** with its local services spinoff **Koubei** with funding from SoftBank. The corporate had previously joined SoftBank to provide about $3bn for the new but still unnamed entity to compete with Meituan Dianping. Alibaba had already invested $1bn in Ele.me when it acquired the rest of the company, which was valued at $9.5bn. It had also launched Koubei in tandem with its financial services affiliate Ant Financial three years before. The new company will cover about 3.5 million merchants in more than 670 Chinese cities and use Alibaba's expertise in areas such as new retail technology, membership, marketing, logistics and finance.

Its rival Meituan-Dianping agreed to acquire China-based bicycle-rental service **Mobike** for $2.7bn. The transaction was reportedly being brokered by Pony Ma, chief executive of Tencent, which also owns a stake in Meituan-Dianping. Founded in 2015, Mobike operates an app-based, dockless bike-sharing service that has attracted hundreds of millions of registered users. The company entered its 200th market in January last year when it launched a service in Paris. Mobike had attempted unsuccessfully to merge with its rival Ofo.

Networking equipment manufacturer Cisco agreed to acquire **Duo Security**, a US-based authentication software provider backed by human resources software producer Workday and Alphabet. Cisco agreed to pay $2.35bn in cash and assumed equity awards for Duo's outstanding shares, warrants and equity incentives on a fully-diluted basis. Founded in 2009, Duo Security operates a cloud-based user verification platform that uses two-factor authentication, where a user has to enter a time-limited code in addition to a password. The technology also assesses the trustworthiness of each device used to log in and restricts access unless both the user has been verified and the device meets company-defined security criteria.

Online payment platform PayPal agreed to acquire Sweden-based mobile payment technology developer **iZettle** for $2.2bn, allowing a group of corporate investors to exit, including Intel, credit card payment companies Mastercard and American Express, and bank Santander. Founded in 2010, iZettle has built a mini-card-reader that enables small businesses to accept contactless and mobile payments, as well as software for taking payments from smartphones, and e-commerce tools that help users create and run an online store.

Pharmaceutical firm Roche agreed to acquire cancer research technology provider **Flatiron Health**, paying $1.9bn for the remainder of the company's shares, giving an exit to GV, the corporate venturing unit of Alphabet. At the time of the acquisition, Roche already owned 12.6% of Flatiron. The price for the remaining shares implied a valuation of about $2.15bn. Founded in 2012, Flatiron has developed an oncology research software platform that stores data from electronic health records. It works with over 265 community cancer clinics and offers access to more than 2 million active patient records.

Pinduoduo raised about $1.63bn when it floated in the US. The company priced the IPO at the top of its $16 to $19 range, issuing 85.6 million American depositary shares on the Nasdaq Global Select Market. The transaction reportedly valued Pinduoduo at $23.8bn including all outstanding share options. The IPO was oversubscribed 20-fold and buyers included Fidelity Investments and Abu Dhabi-owned sovereign wealth funds.

Top 10 funding initiatives 2018

	Location	Sector	Type	Funds raised	Investors
SoftBank Vision Fund II	Japan	Sector-agnostic	VC fund	$45bn	Public Investment Fund | SoftBank
Hidden Hill Modern Logistics Private Equity Fund	China	Transport, services	VC fund	$1.6bn	Hidden Hill Capital | Global Logistics Providers | China Post Capital
Sinopec Capital	China	Energy, IT, industrial, services	CVC unit	$1.48bn	Sinopec Engineering Group
Starquest Capital	China	Sector-agnostic	CVC unit	$1.45bn	China Reform Holding | Sequoia Capital | Capital Venture Investment Fund | JD.com
Community Influence	China	Financial services	VC fund	$1bn	Binance
Alliance Ventures	France	Transport	CVC unit	$1bn	Renault | Nissan | Mitsubishi
Qiming Venture USD Fund VI	China	Sector-agnostic	VC fund	$935m	Qiming Venture Partners | Mayo Clinic | Princeton University | Massachusetts Institute of Technology | Duke University
Pfizer Ventures	US	Health	CVC unit	$600m	Pfizer
EWTP Technology and Innovation Fund	China	Sector-agnostic	VC fund	$600m	Electronic World Trade Platform | Alibaba | Ant Financial
Schneider Electric Ventures	France	Energy	CVC unit	$565m	Schneider Electric

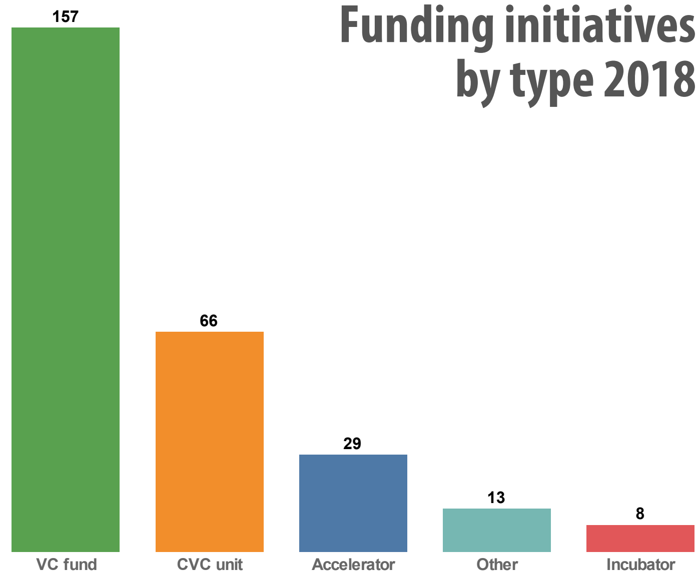
Funding initiatives

GCV tracked 273 funding initiatives receiving corporate backing in 2018, including 157 venture funds, 66 new venturing units, 29 corporate-backed accelerators, eight incubators and 13 other initiatives. Most of these initiatives were set up in North America (111), Asia (88) and Europe (50). The countries that hosted the largest number of such initiatives were the US (101), China (38), Japan (16), France (16) and Singapore (13).

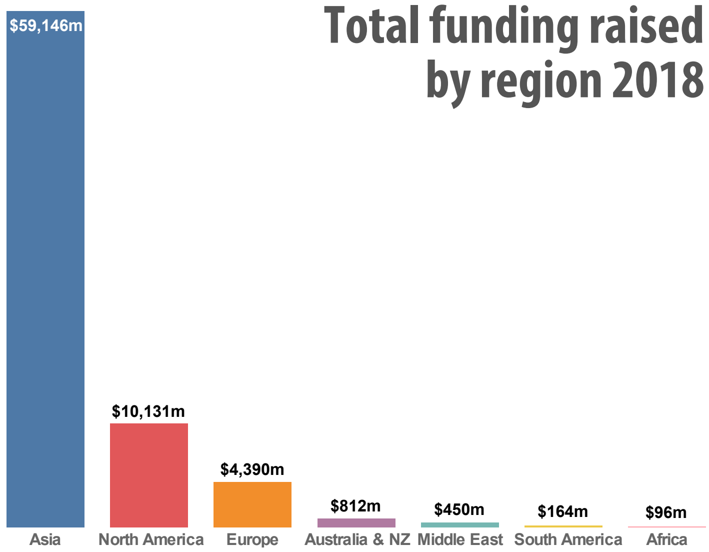
The number of corporate-backed initiatives dropped 7% compared with the 293 reported in 2017. The total estimated size of the initiatives at $75.19bn was significantly higher than the 2017 figure of $43.82bn, though this was largely due to the effect of the unusually large second Softbank Vision Fund, large commitments for which were announced in the second half of last year.

The top funding initiatives we reported last year ranged in scope of their targeted sectors from logistics and consumer through energy and autotech to blockchain and cryptocurrencies. Asia accounted for $59.19bn or about 79% of the total capital raised in such initiatives in 2018, which points to the leading role of the region now and probably in the future.

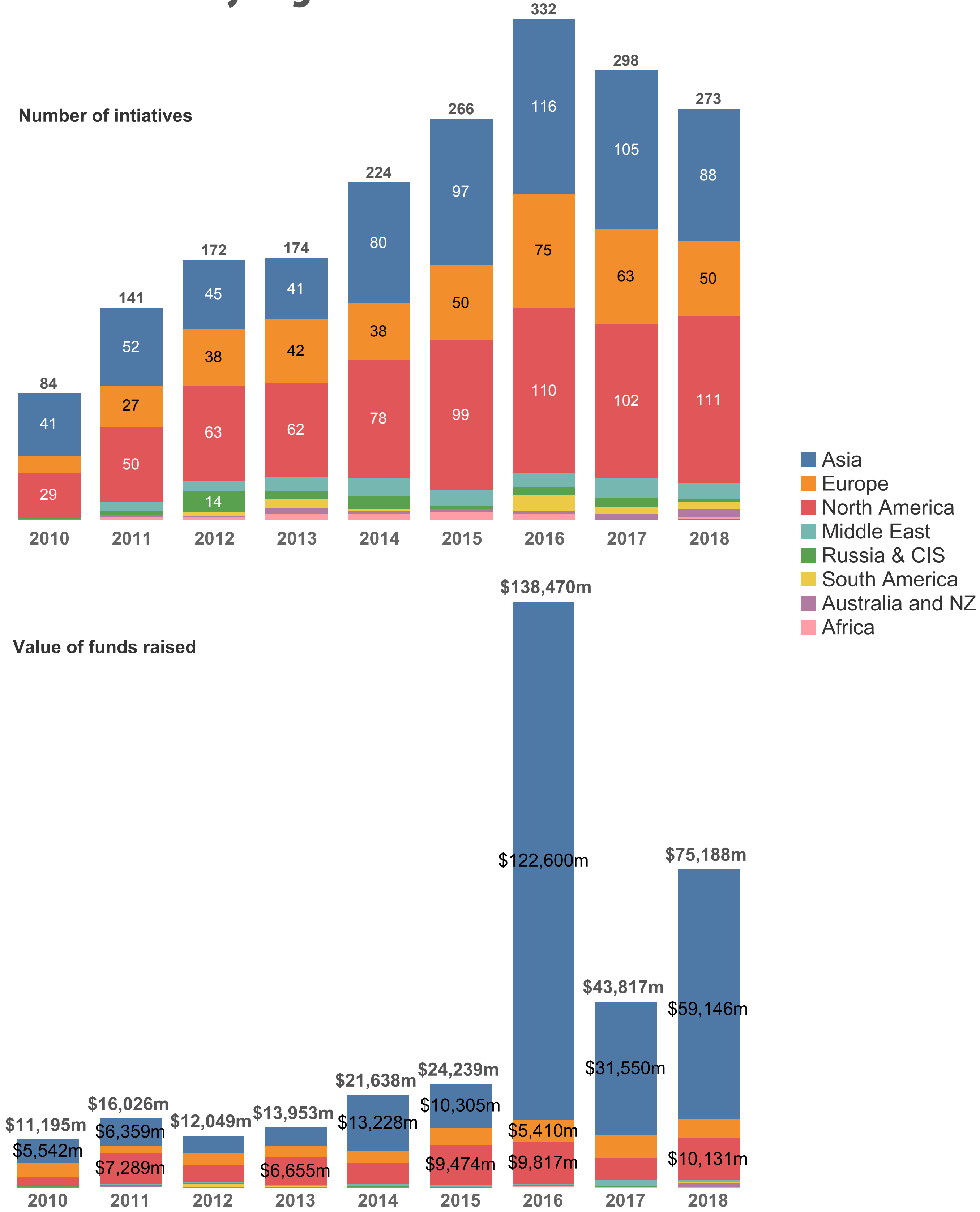
Funding initiatives by type 2018



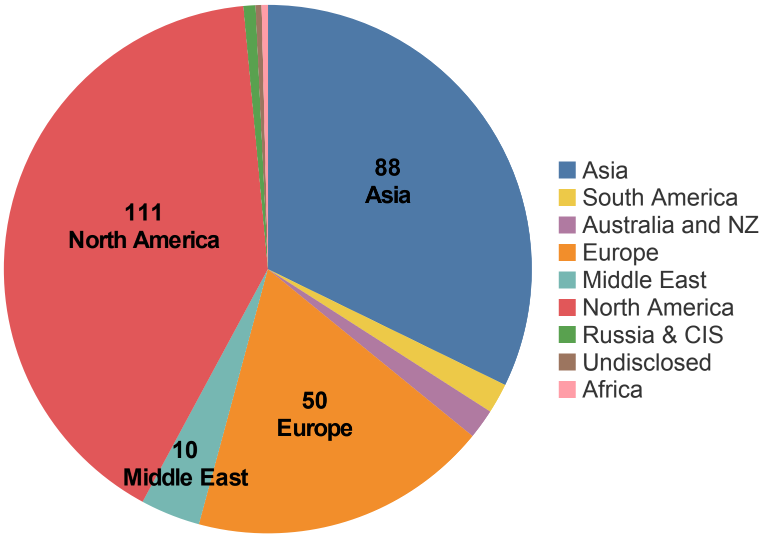
Total funding raised by region 2018



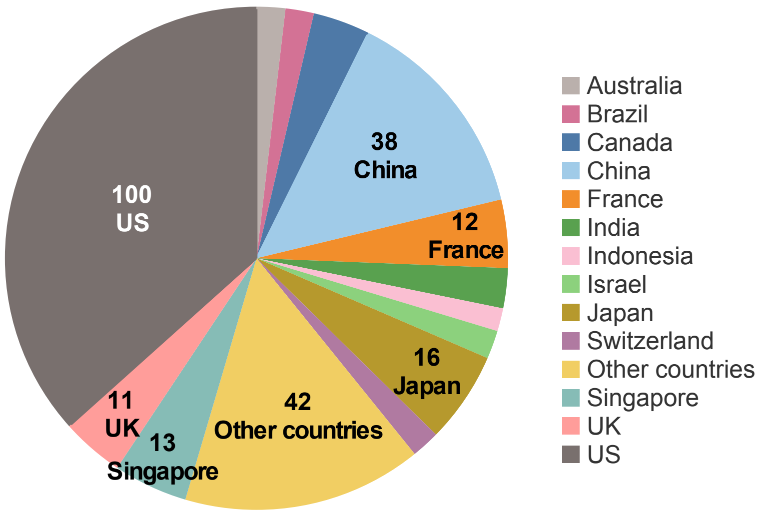
Corporate-backed funding initiatives by region 2010-18



Funding initiatives by region 2018



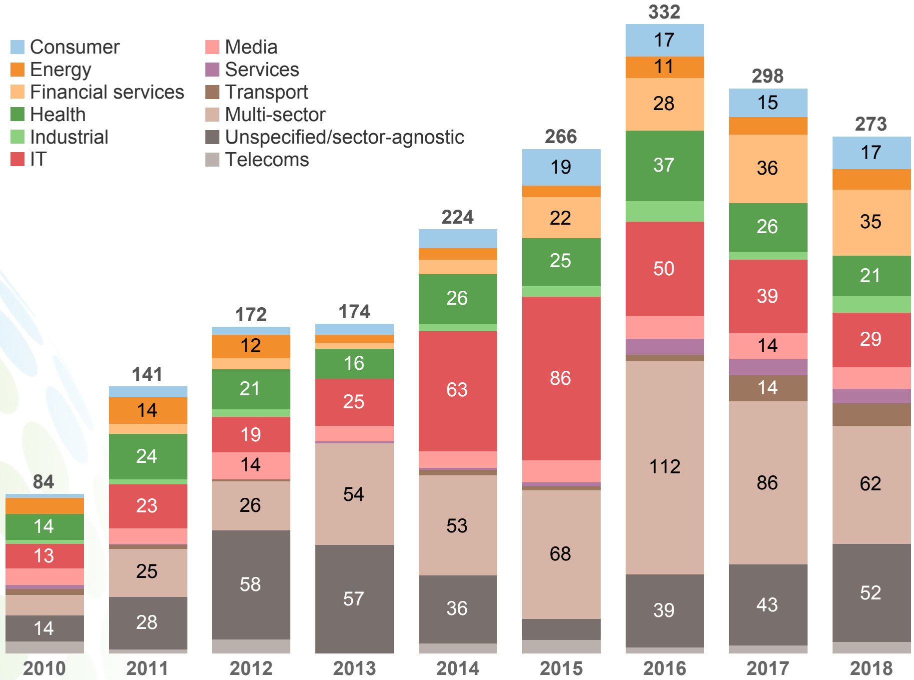
Funding initiatives by country 2018



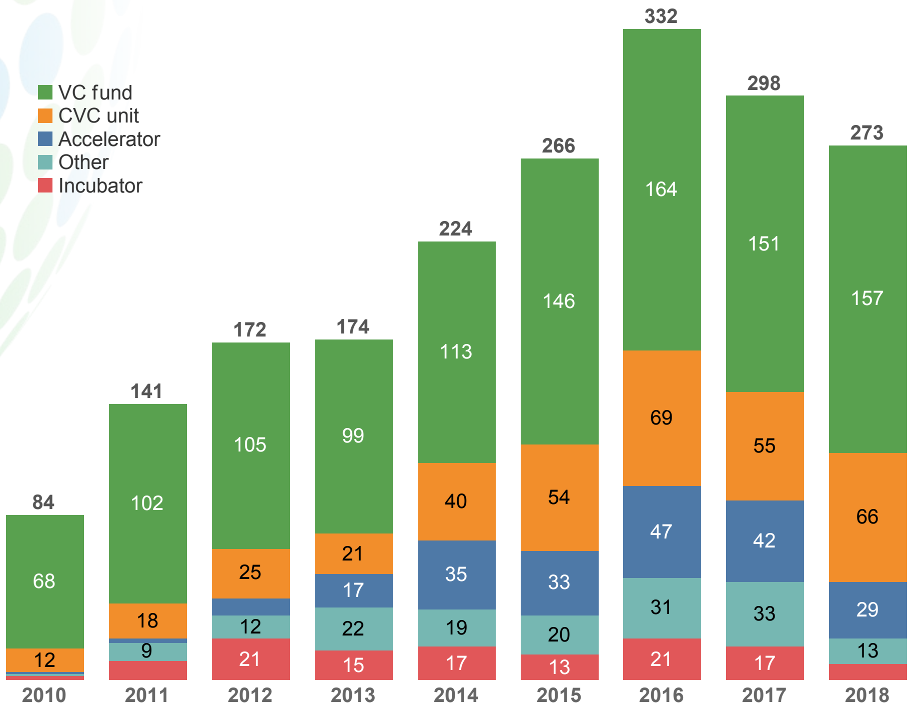
The relative weight of Asia, however, was attributable to a single large fund being raised. Saudi Arabia's state-owned Public Investment Fund (PIF) agreed to commit $45bn to the second SoftBank Vision Fund, effectively replicating its $45bn contribution to the first fund, which had secured $97.7bn of its $100bn target by the end of 2017. SoftBank was reported to have begun talks with prospective limited partners for a second fund. Its fund included $25bn from SoftBank and contributions from corporates Apple, Foxconn, Sharp and Qualcomm, and Abu Dhabi's Mubadala Investment Company. PIF chairman Mohammed Bin Salman told Bloomberg: "We have a huge benefit from the first one. We would not commit another $45bn if we did not see huge income in the first year from the first $45bn." The first fund has so far targeted nine and 10-figure investments in artificial intelligence-related and online consumer-focused companies.

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

Corporate-backed funding initiatives by target sector 2010-18



Corporate-backed funding initiatives by type 2010-18



China-based oil, gas and chemicals supplier Sinopec formed investment firm Sinopec Capital, equipped with RMB10bn. Sinopec Capital will invest in emerging areas such as new energy, advanced materials, artificial intelligence and smart manufacturing and supply chain technologies. Although Sinopec did not state directly that the vehicle would invest in startups, its activities will cover equity investments and management as well as project investments and asset management. The fund will receive 49% of its capital from oil and gas refiner Sinopec Corp and the remaining 51% from parent company Sinopec Group, which also produces a range of petroleum-related products.

jetBlue technology ventures

PORTFOLIO SNAPSHOT

- Gladly
- JOBY AVIATION
- CLIMACELL
- Unicoaero
- skyhour
- FLYR
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FAST FACTS

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- Reviewed 4,000+ Startups
- 12 Team Members
- Based in California & New York

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Co-investor analysis 2018

	Intel	Alphabet	International Data Group	Qualcomm	SoftBank	Tencent	Salesforce	Goldman Sachs	Johnson & Johnson	Fidelity	General Electric	Sequoia Capital	Kleiner Perkins	New Enterprise Associates
Intel		10	3	9		1	3	8		5	8	11	18	8
Alphabet	10		5	10	11	9	10	13	2	11	7	36	73	24
International Data Group	3	5		5	1	10		2		2		26		4
Qualcomm	9	10	5		10	1		8		7	5	19	5	13
SoftBank		11	1	10		7		4		3	1	18		6
Tencent	1	9	10	1	7			6	1	2		35	1	
Salesforce	3	10						3		4	1	8	9	10
Goldman Sachs	8	13	2	8	4	6	3			5	4	5	7	10
Johnson & Johnson		2				1				1	1	1	7	8
Fidelity	5	11	2	7	3	2	4	5	1		3	7	3	11
General Electric	8	7		5	1		1	4	1	3		5	11	4
Wells Fargo (NVP)	12	13	6	6	2	1	2	9		2	5	9	7	9

Columns include non-CVCs and CVCs; rows are only CVCs

JD.com joined a number of partners to raise up to RMB40bn for venture capital fund Starquest Capital, also known as Xingjie Capital. It will be run by private equity firm China Reform Holdings, which already oversees the $30bn Chinese state-owned Capital Venture Investment Fund. VC firm Sequoia Capital China is also a limited partner in the vehicle. The renminbi-denominated fund will target later-stage investments in technology companies. It has secured 25% of its target, reportedly from domestic backers.

China-based cryptocurrency exchange Binance announced a $1bn fund to invest in blockchain and cryptocurrency startups. The fund, Community Influence, will be denominated in Binance's own cryptocurrency, BNB, and will invest both directly and through other funds. Binance will seek experienced fund managers – defined by the company as those that have managed at least $100m in assets – to create new funds. The company also hopes to launch a Binance Ecosystem Fund with 20 as-yet-unnamed partners. Binance has already backed startups through its social impact fund Labs and is working on creating an incubator.

Automotive manufacturing partnership Renault-Nissan-Mitsubishi took the wraps off corporate venturing vehicle Alliance Ventures, through which it intends to invest up to $1bn. The unit plans to provide up to $200m for startups and open innovation projects during its first year of operation, with the $1bn figure representative of what it intends to commit over five years. The alliance, initially formed when France-based automaker Renault and Japan-headquartered Nissan exchanged equity stakes in 1999, was extended in 2016 when Nissan acquired a 34% share of Japan-based Mitsubishi. The unit will target mobility technologies such as automotive electrification, vehicle connectivity, artificial intelligence and autonomous systems. It intends to invest at all stages of company development as well as incubating new businesses. The unit will have offices in Paris, Yokohama and Beijing. Renault and Nissan will each provide 40% of the capital, while Mitsubishi will supply the remaining 20%.

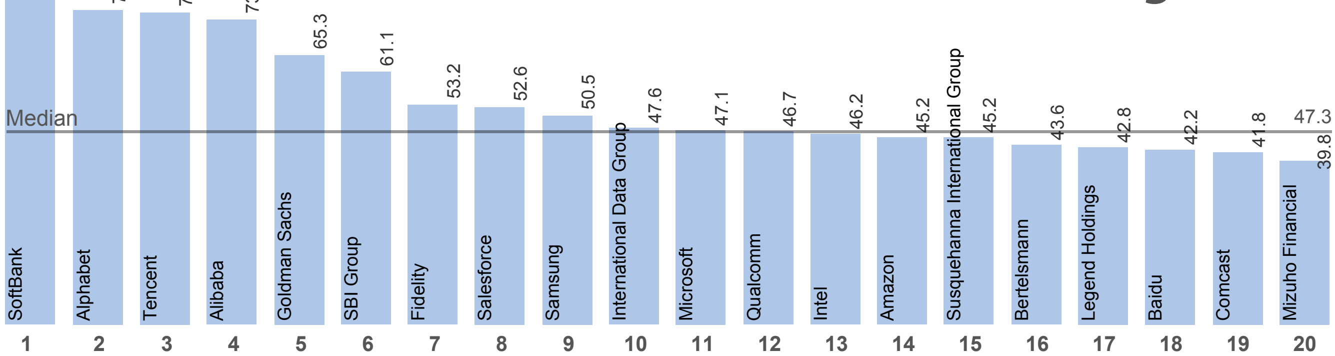
China-based venture capital firm Qiming Venture Partners closed a $935m fund, securing capital from limited partners including medical practice and research group Mayo Clinic. Qiming Venture USD Fund VI's investors also include Princeton University, Massachusetts Institute of Technology and Duke University, as well as superannuation fund NGS Super, Commonfund, Hall Capital Partners and the Dietrich Foundation. The vehicle was announced alongside two other funds – the renminbi-denominated Qiming Venture RMB Fund V, which has attracted RMB2.1bn in commitments, and Qiming US Healthcare Fund I, which has secured $120m. Both Qiming VI and Qiming RMB V will target Chinese companies in the internet and consumer healthcare, IT and cleantech sectors, while the Healthcare Fund will invest in early-stage healthcare startups in the US.

Pharmaceutical firm Pfizer is planning to invest $600m in biotech and other emerging technologies through new corporate venturing division Pfizer Ventures. Early-stage neuroscience companies will be a key focus, with about $150m allocated to such startups. Initial areas of interest will include neuro-degeneration, neuro-inflammation and neuro-metabolic disorders. The $600m comes as part of a restructuring effort that combines Pfizer Venture Investments, the company's existing corporate venturing arm, with research and development equity investment vehicle R&D Innovate. The unit will continue to invest in areas that are of strategic interest to its parent, including oncology, inflammation, immunology, rare disease, internal medicine and vaccines, as well as in companies working on novel approaches to drug discovery, development and manufacturing.

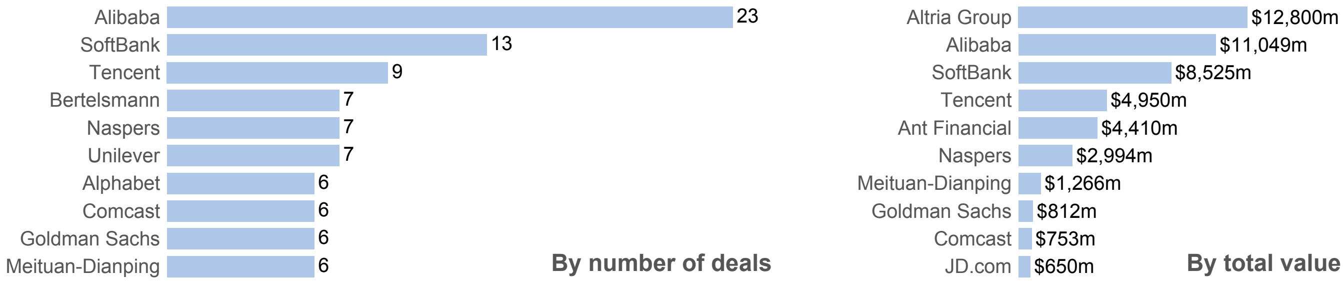
Trade organisation Electronic World Trade Platform (EWTP) launched a $600m investment fund featuring Alibaba and Ant Financial as anchor investors. EWTP was first proposed by Alibaba co-founder and chairman Jack Ma in 2016 to help lower trade barriers and support the expansion of small and medium-sized enterprises' international activities by helping them operate online. The EWTP Technology and Innovation Fund will invest in companies expanding internationally and will support technology startups across the world. Alibaba will provide expertise on logistics, payment and e-commerce. The fund will also identify projects closely related to the Belt and Road Initiative, a Chinese government policy that seeks to strengthen economic ties throughout Eurasia.

France-based energy management and automation technology producer Schneider Electric launched a dedicated corporate venturing unit to invest between €300m ($340m) and €500m in startups. Schneider Electric Ventures will target energy efficiency and sustainability, in areas such as energy use and industrial management, and will invest in startups, dedicated strategic funds, incubation initiatives and partnerships with entrepreneurs. In addition to its external deals, Schneider Electric Ventures has incubated solar technology installer Clipsal Solar and electric vehicle fleet services provider EIQ Mobility, and formed the Greentown Labs Bold Ideas Challenge in partnership with hardware incubator Greentown Labs.

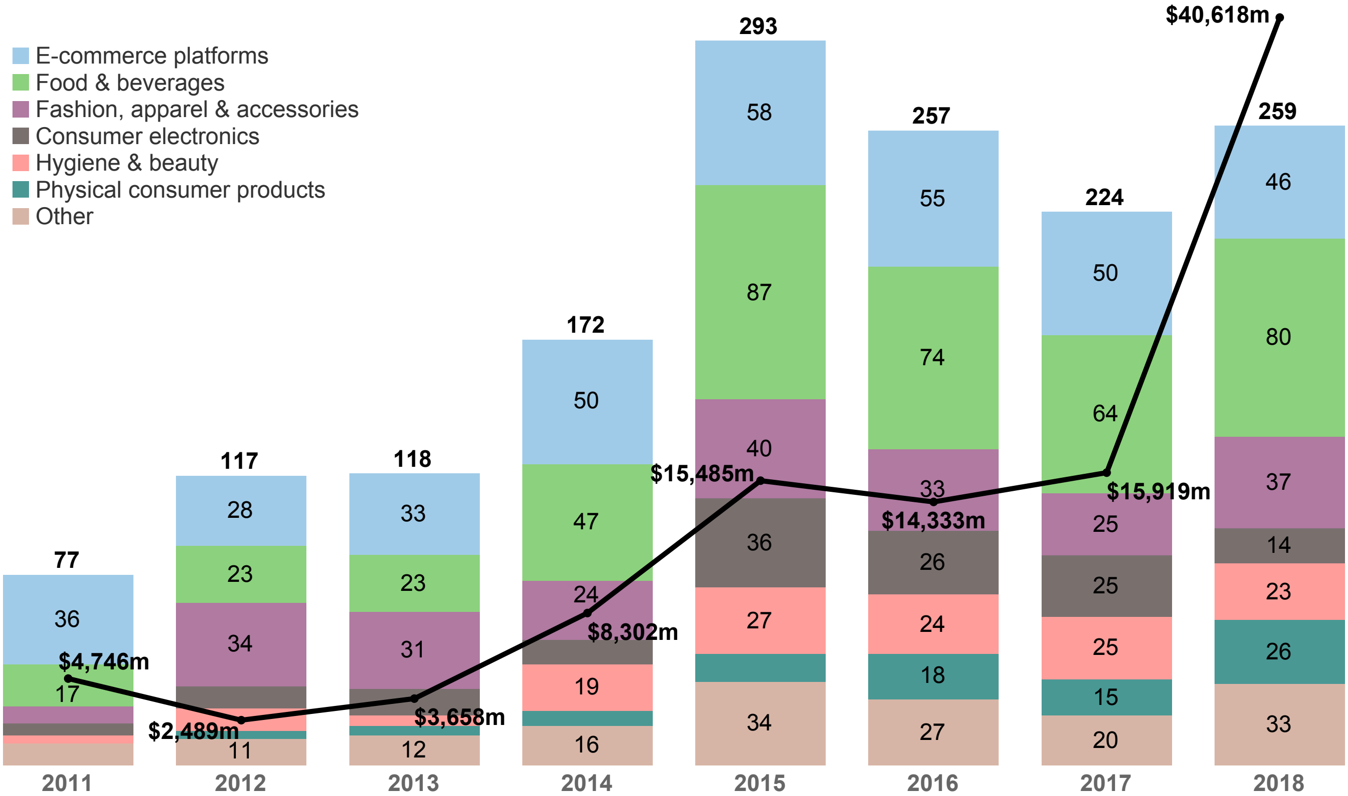
Power rankings 2018



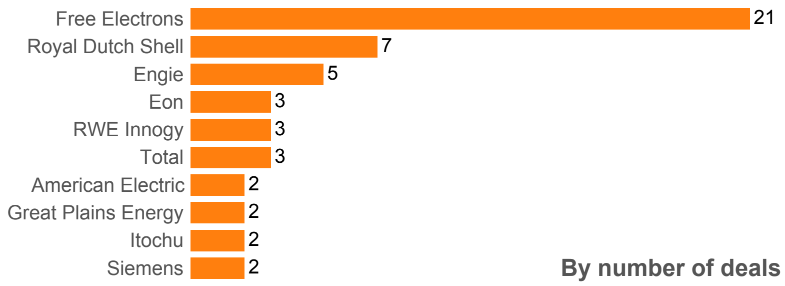
Top investors in consumer enterprises 2018

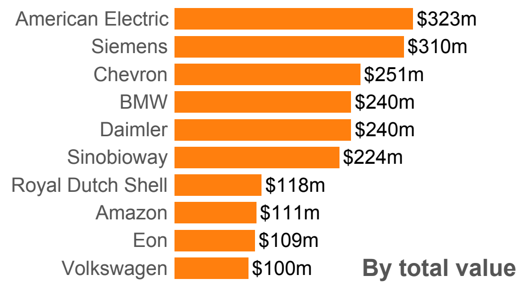


Consumer sector deals by subsector 2011-18

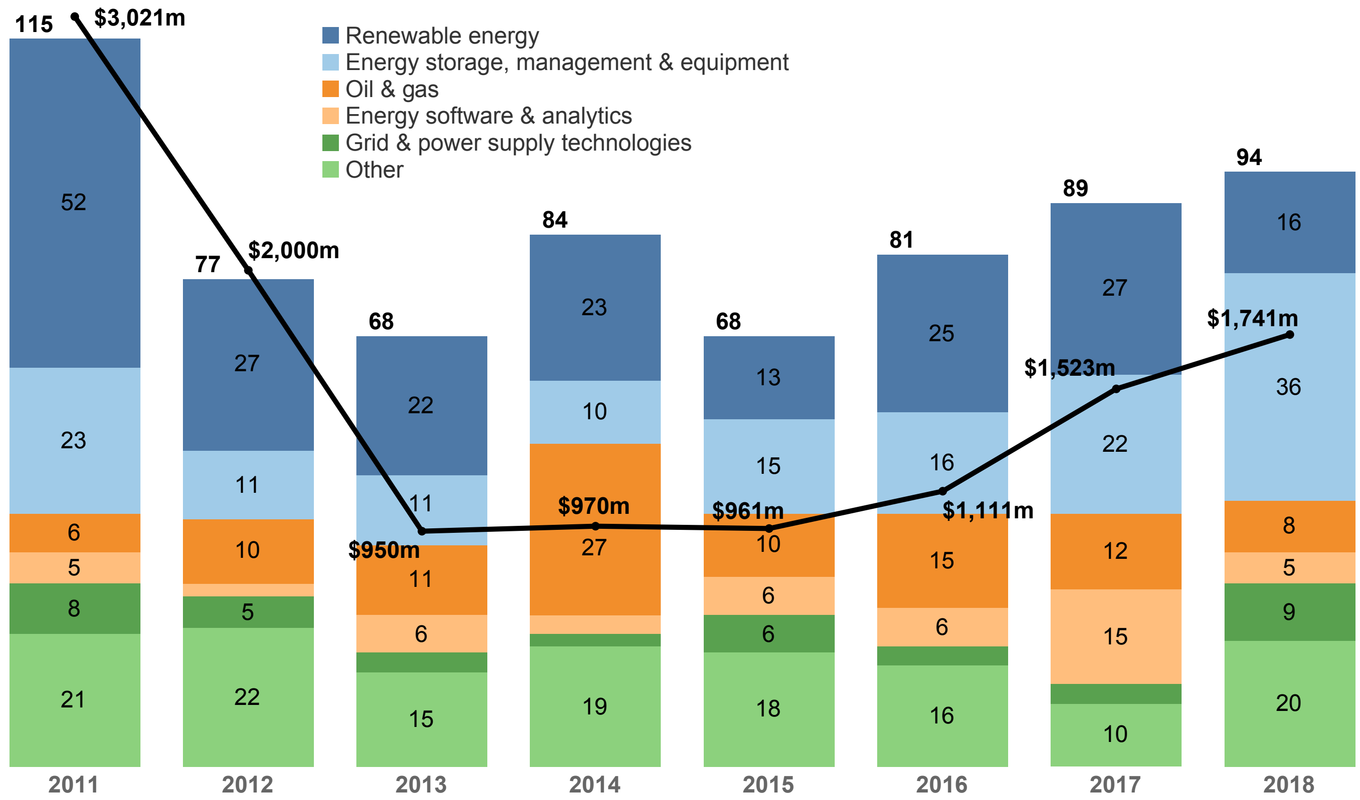


Top investors in energy enterprises 2018

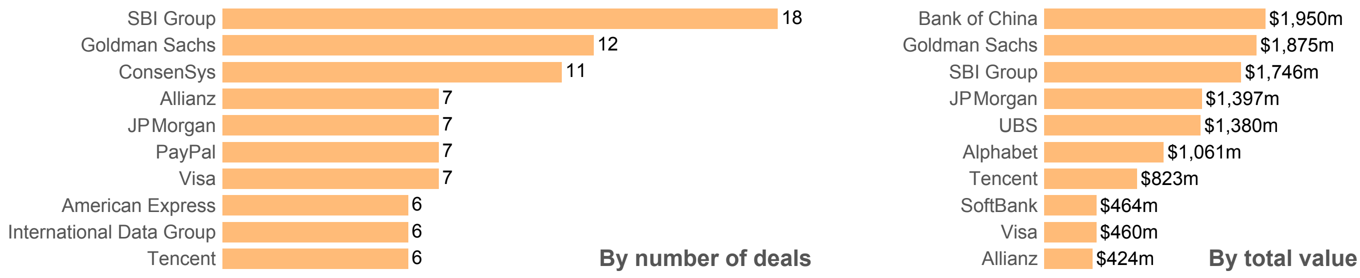




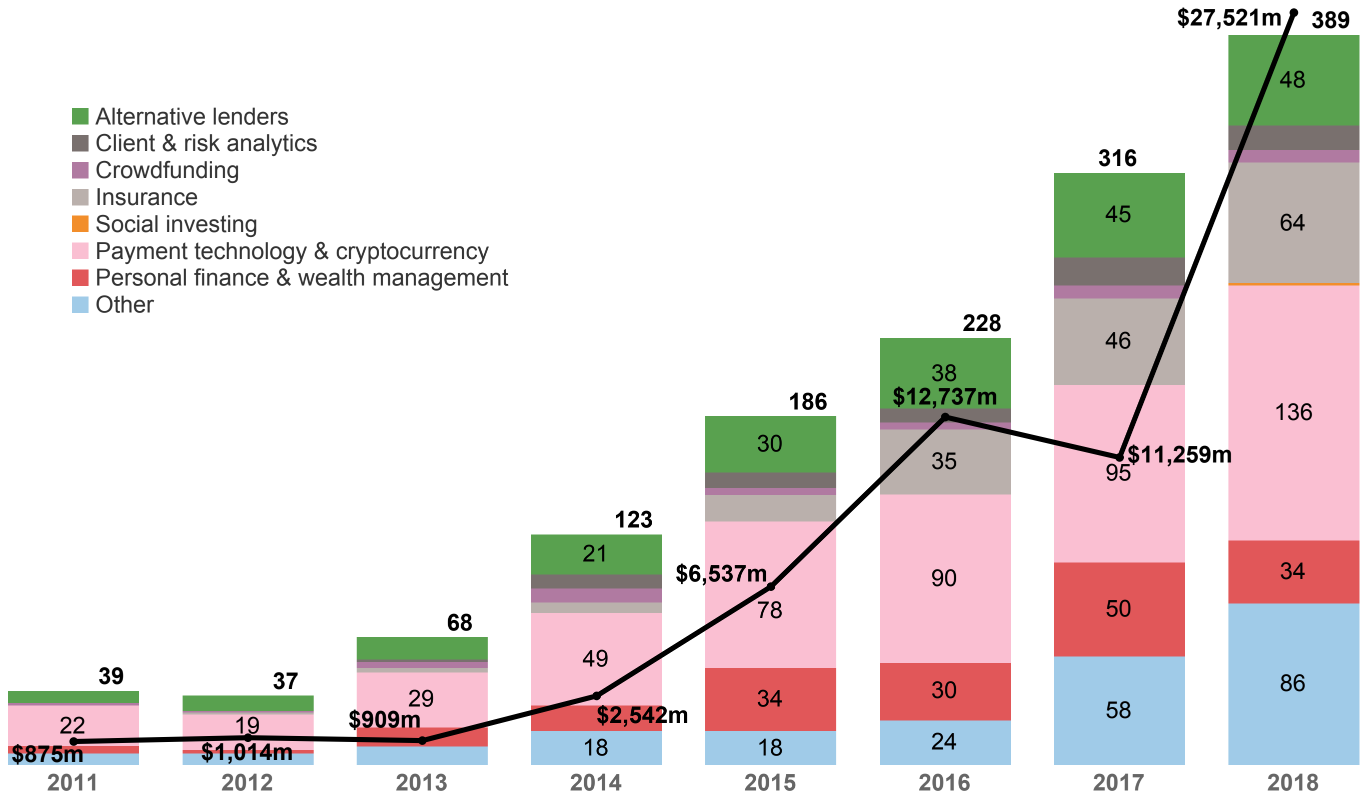
Energy sector deals by subsector 2011-18



Top investors in financial enterprises 2018



Financial services sector deals by subsector 2011-18



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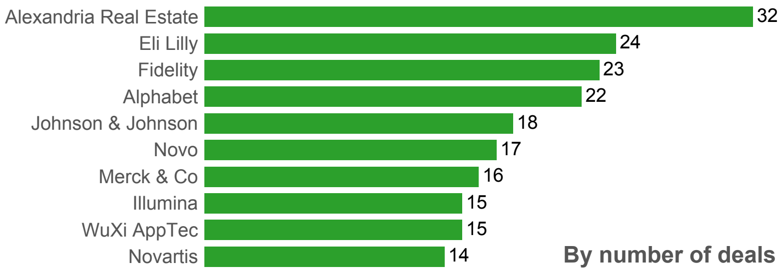
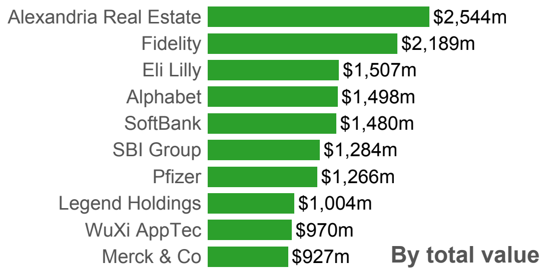
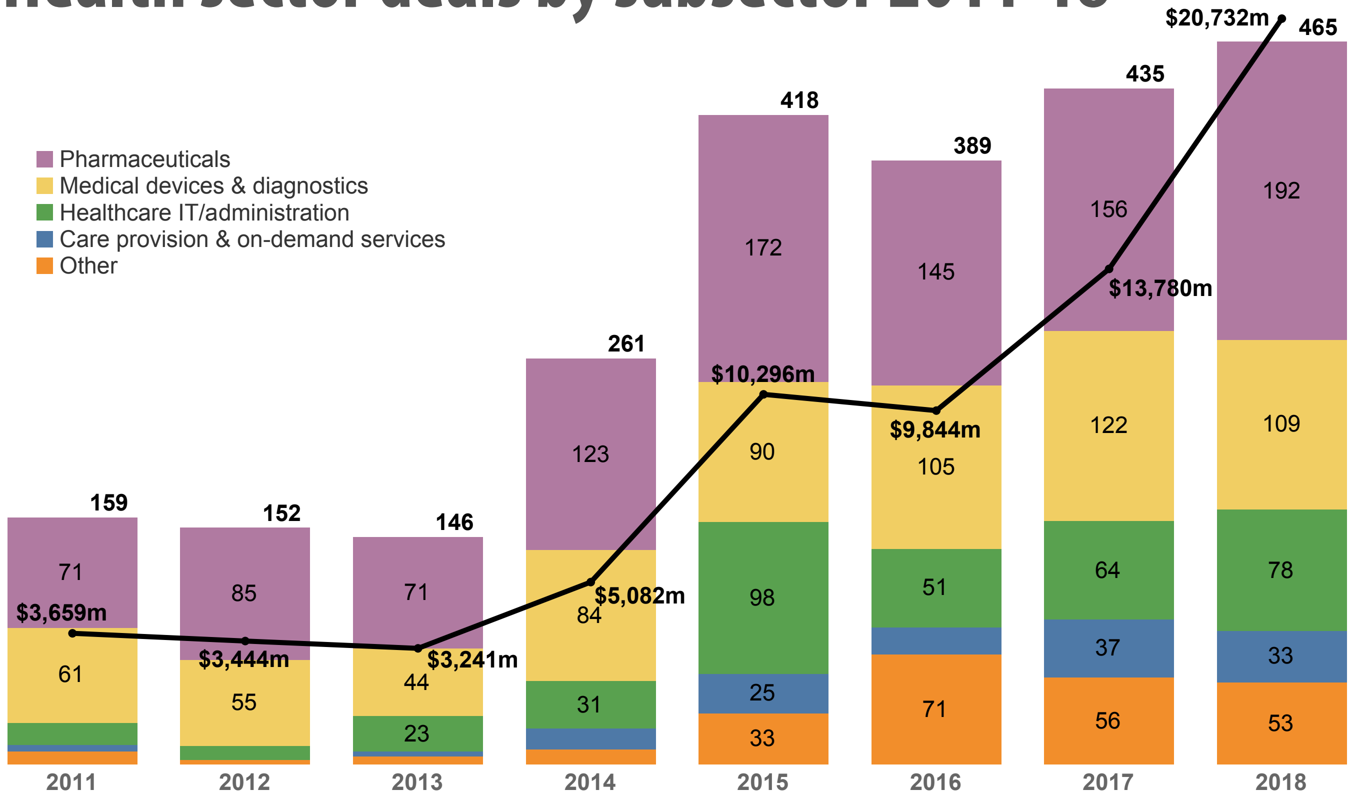
Top investors in health enterprises 2018





Health sector deals by subsector 2011-18



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SEMICONDUCTOR

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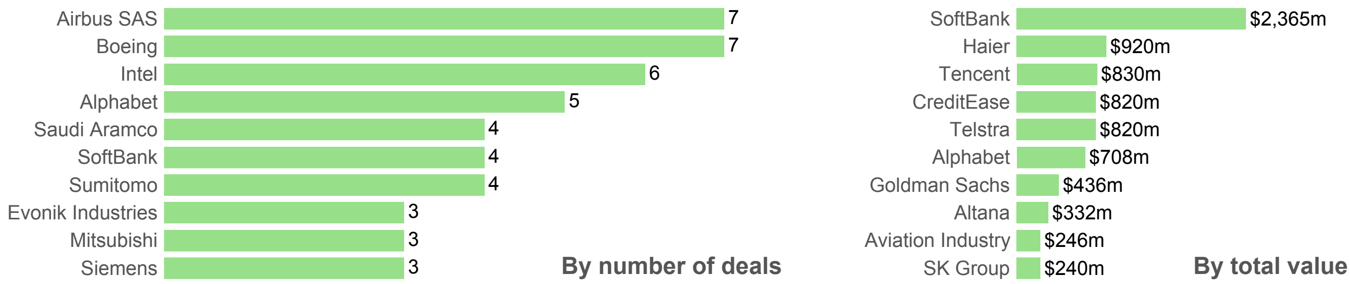
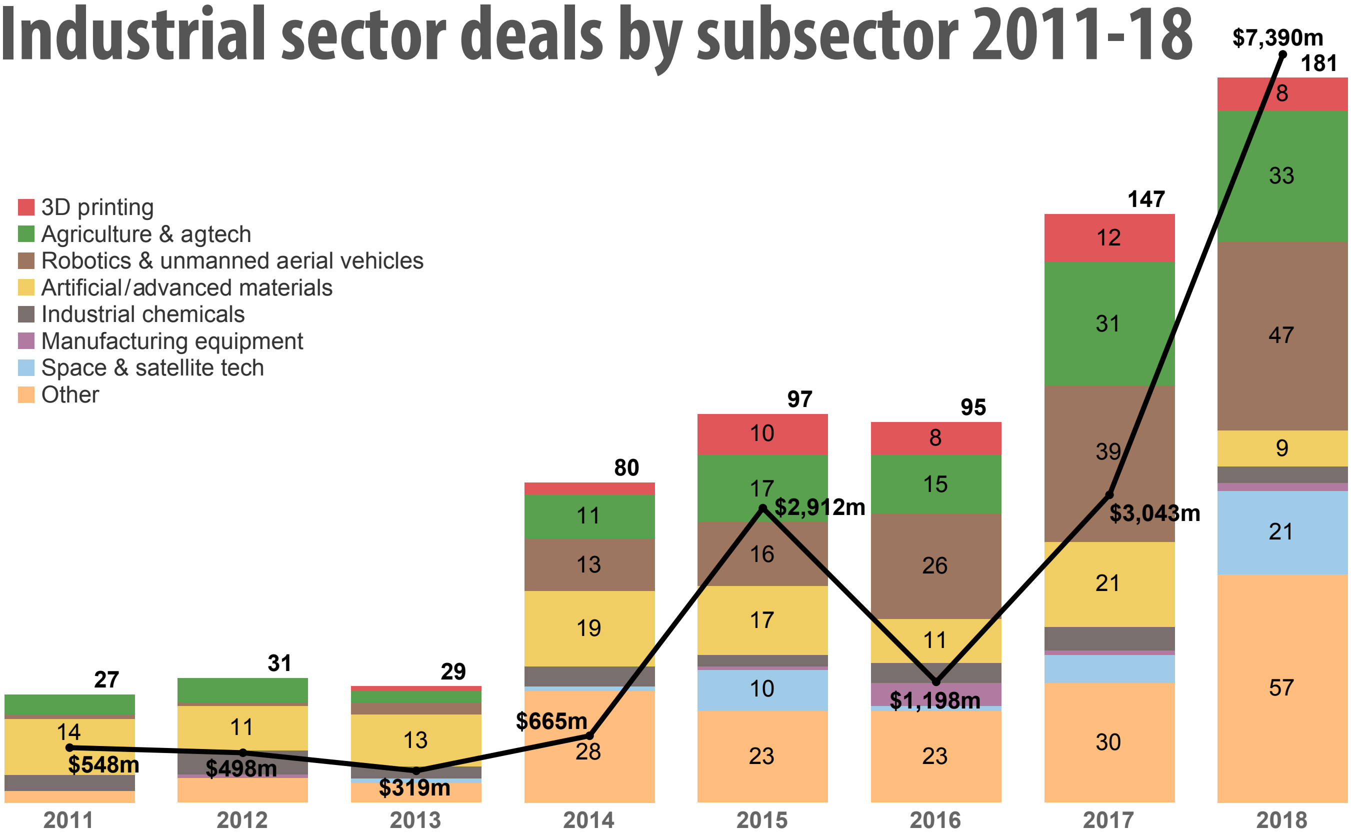
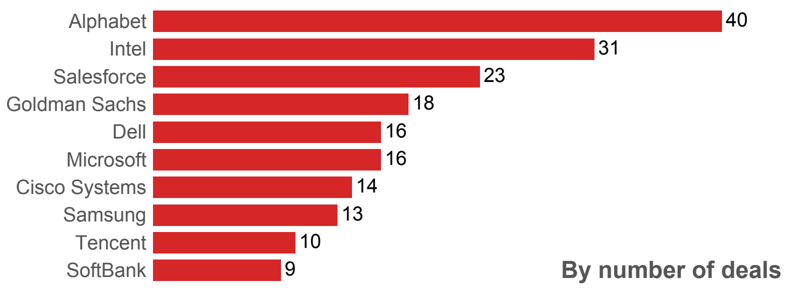
Top investors in industrial enterprises 2018

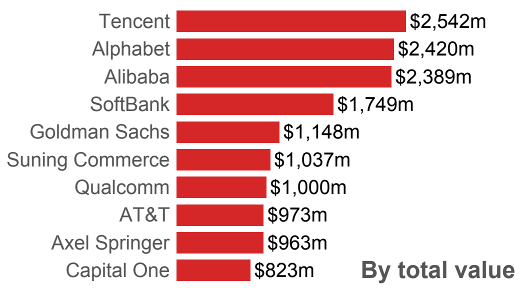


Industrial sector deals by subsector 2011-18

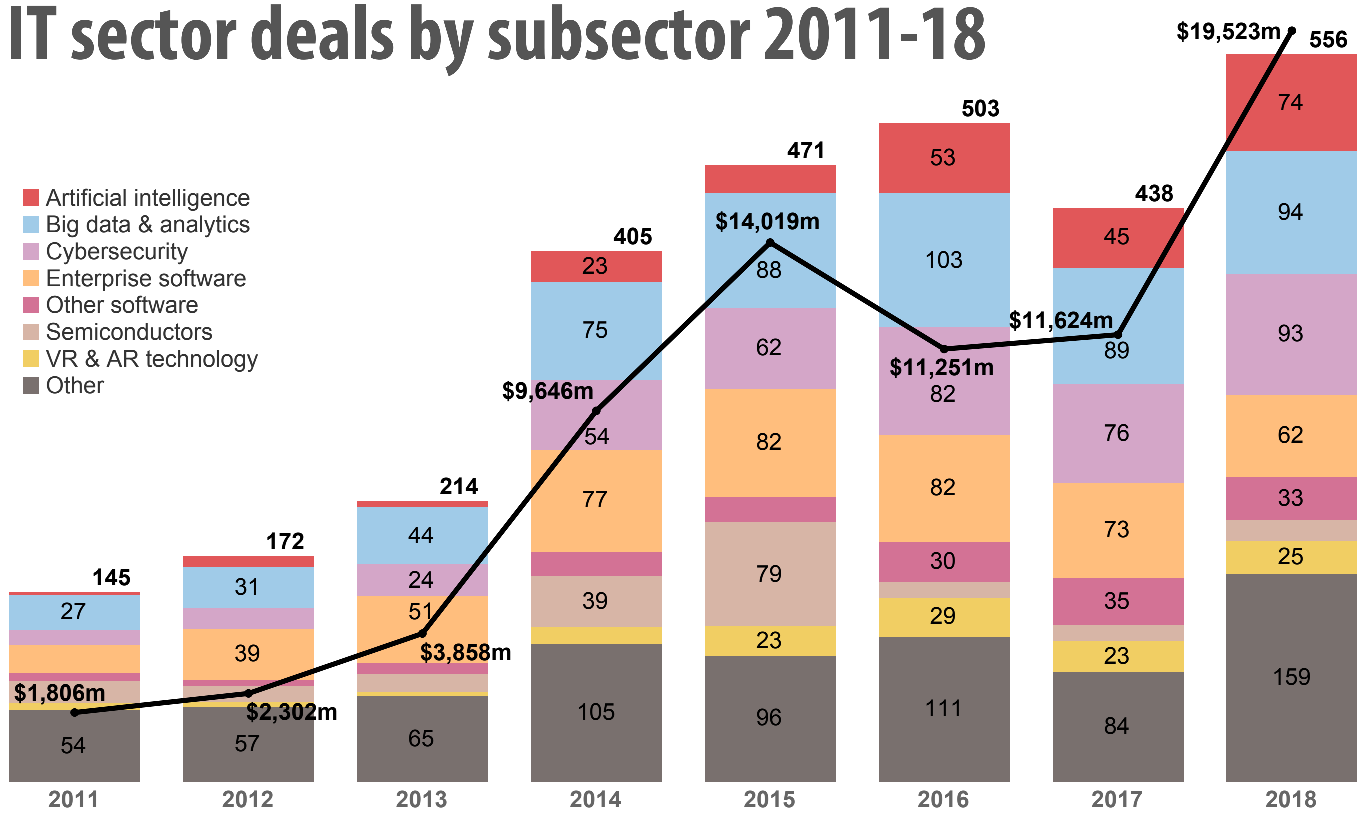


Top investors in IT enterprises 2018



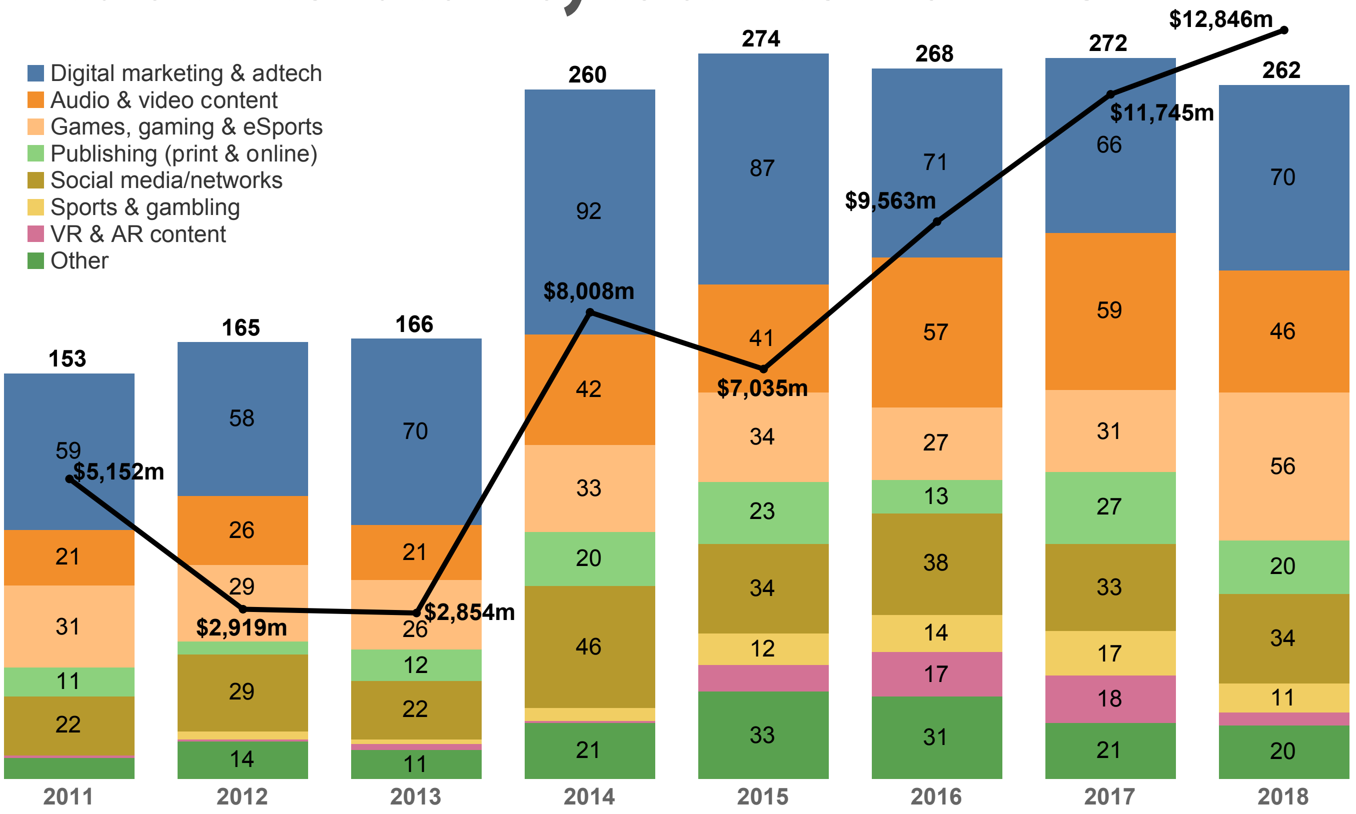


IT sector deals by subsector 2011-18

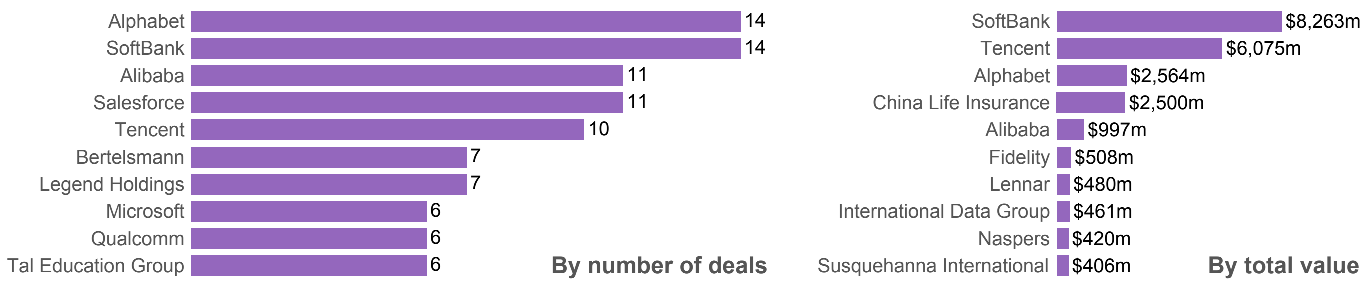


Top investors in media enterprises 2018

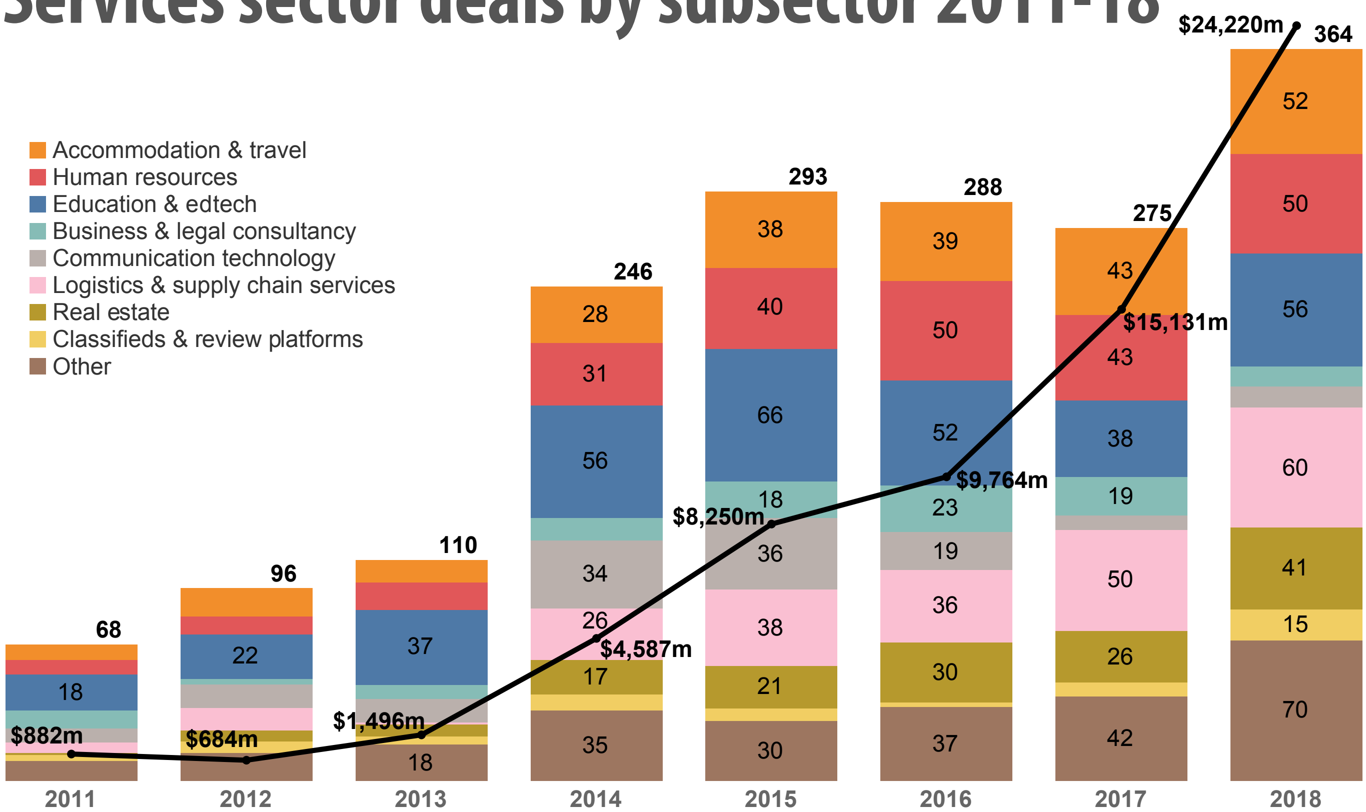
Media sector deals by subsector 2011-18



Top investors in services enterprises 2018



Services sector deals by subsector 2011-18

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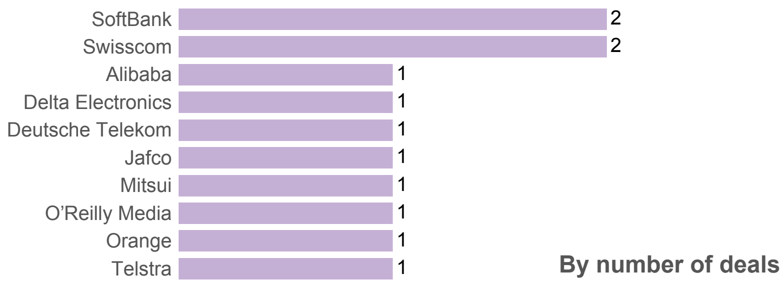
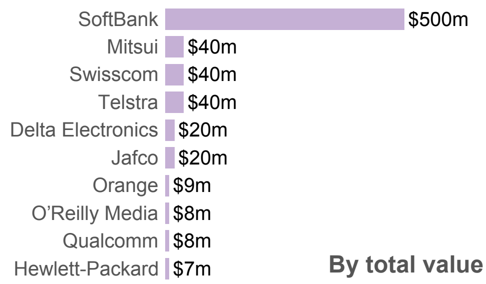
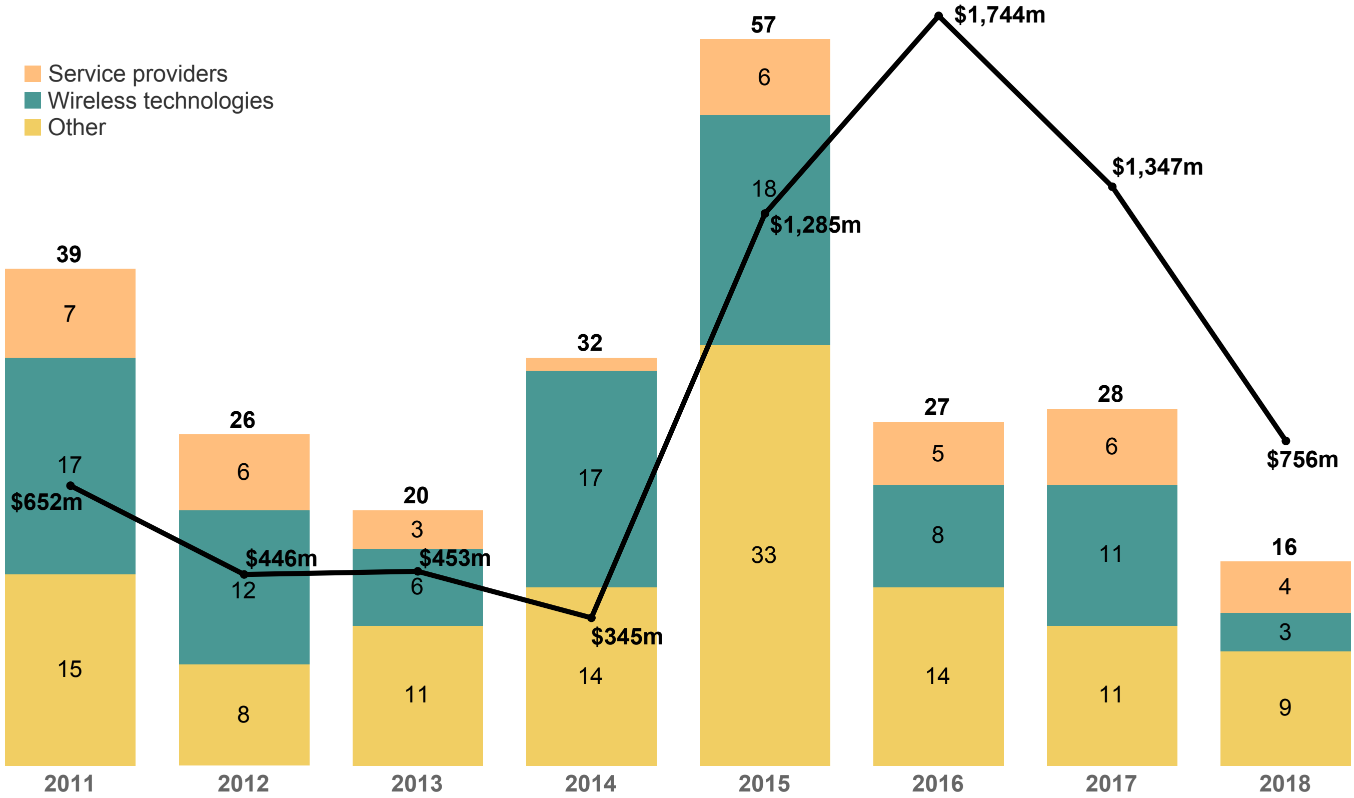
Top investors in telecoms enterprises 2018





Telecoms sector deals by subsector 2011-18



Global Corporate Venturing

Verizon Ventures

Delivering on the promise of a digital world

About Verizon Ventures

Combining smart capital with access to Verizon's ecosystem and strategic roadmap, Verizon Ventures is the valuable bridge connecting innovators with pathways that advance their businesses in growing and impactful sectors.

With a guiding philosophy that champions the drive it takes to innovate beyond the world's wildest imagination, Verizon's team of experienced investment and venture development professionals takes a collaborative, portfolio-first approach that connects innovation with opportunity. We back big new ideas and help you accelerate and commercialize with a network of meaningful resources.

Our Focus

Verizon Ventures focuses on the following investment areas:

Core: Companies that are working to create innovative technologies, products, and services that will further our three core customer-focused business groups: consumer, business, and media. Examples of core investments include advanced communications network technologies, security, telematics, and data analytics to help serve the customer.

Emerging: Companies that will help expand Verizon's capabilities, bringing new and engaging products and services to our customers. Examples of emerging investments include technologies furthering 5G, MEC, IoT and smart cities, blockchain applications, and advanced mobility.

Frontier: Companies looking to be tomorrow's technology leaders by pushing the boundaries of what is currently possible, providing Verizon the opportunity to explore new sectors. Example of frontier investment areas include AR/VR, AI, quantum computing, and micro satellite technology.

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The Verizon Ventures portfolio is comprised of many technology companies at the forefront of innovation in their respective fields. Here are just a few:

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playsight · PRECISIONHAWK · RENOVO AUTO · sparkcognition · URGENTLY · VERSA NETWORKS · YB

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Verizon Ventures

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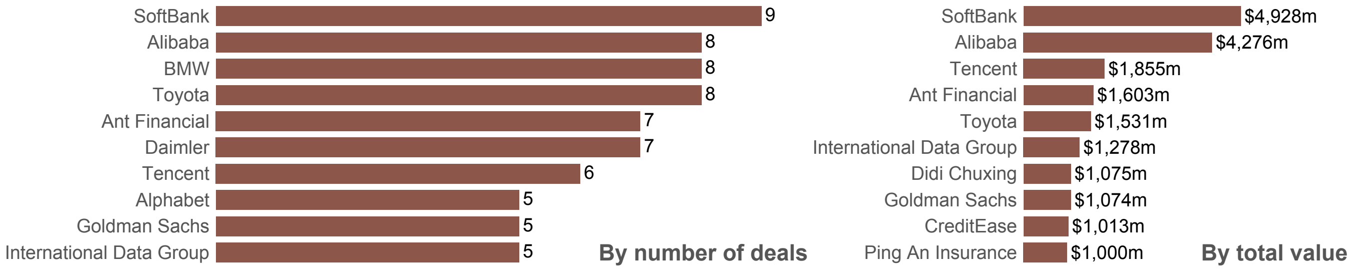
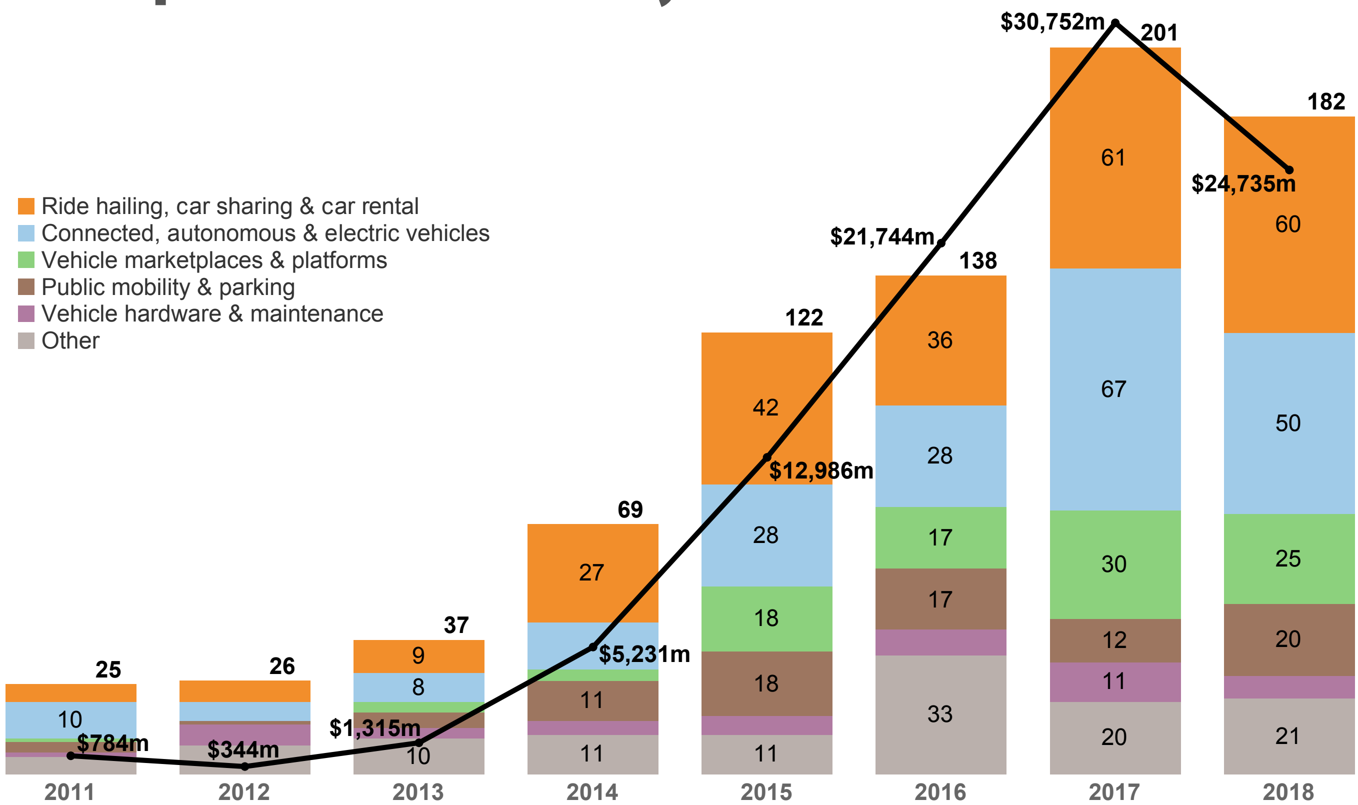
Top investors in transport enterprises 2018



Transport sector deals by subsector 2011-18



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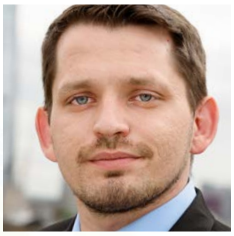
THE GLOBAL CORPORATE VENTURING SURVEY 2019



Kaloyan Andonov
reporter, GCV Analytics

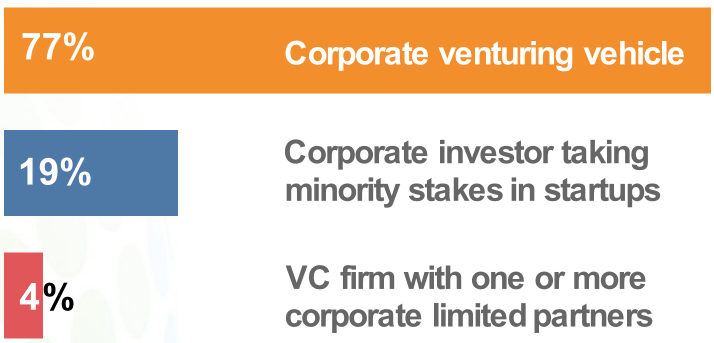
Throughout October and November 2018, GCV Analytics conducted its annual survey on the state of corporate venturing. The study was sponsored and supported by General Electric and Fenwick & West, and conducted in cooperation with the Japan Venture Capital Association and the Brazilian Private Equity and Venture Capital Association. These institutions will have access only to anonymised and aggregated survey results.

A total of 95 corporate venturers took part in the survey this year. Respondents included executives and team members of corporates venturing units (77%), corporate investors taking minority stakes with no special units (19%) as well as VC firms that have one or more corporate limited partners (4%). All 10 sectors covered by Global Corporate Venturing are represented in the sample.

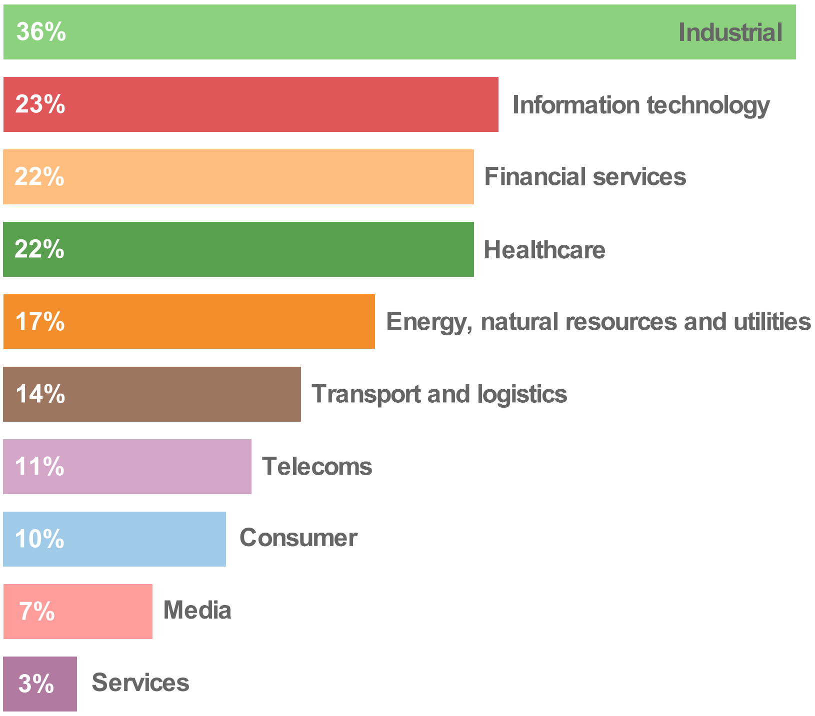
The survey questionnaire consisted of 40 questions encompassing various aspects of corporate venturing. The response rate per question varied depending on participants' willingness to disclose information about their unit and investments. The average number of respondents per question was 88, a high response rate of 93%.

Survey respondents and the respective venturing units they represent are kept strictly anonymous in this graphical summary of the survey results, illustrated here only in a statistically aggregated fashion.

What best describes your organisation?



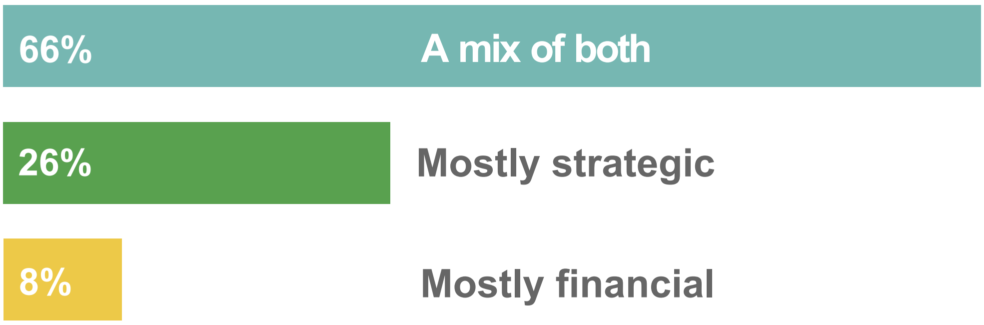
What sectors describe your parent company?



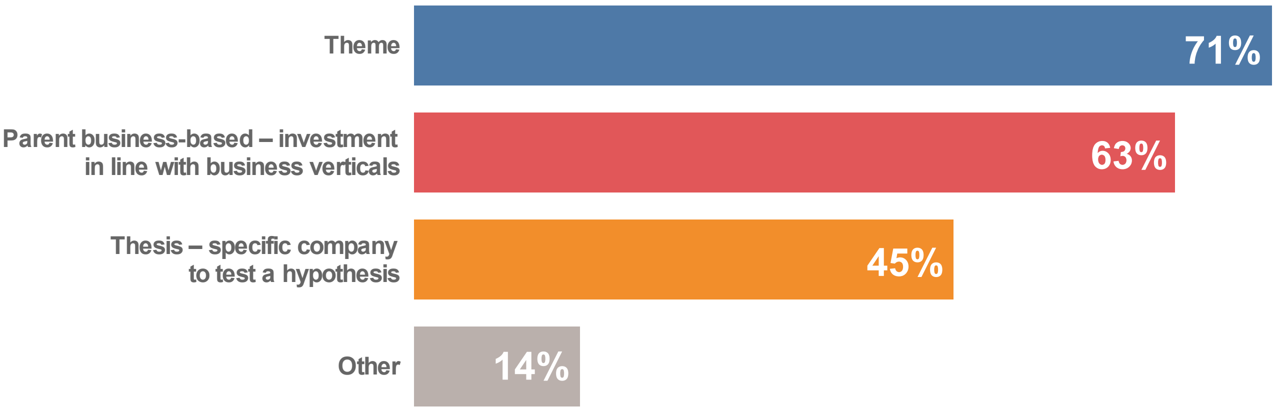
Two-thirds of respondents – 66% – say their investment priorities consist of a mix of financial and strategic return considerations. Slightly more than a quarter (26%) say they focus mostly on strategic returns, and only 8% say they prioritise financial returns. These results are in line with the nature of corporate venturing and consistent with results from previous surveys.

Strategically-oriented venturing units seek to invest in promising emerging businesses based on a mix of criteria, whether theme-based (71%), looking for investees in line with business verticals (63%) or investing in a specific company to test a hypothesis (45%).

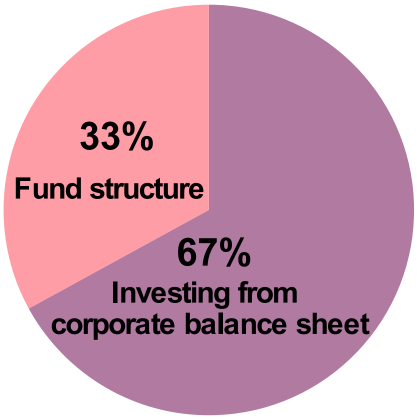
Is your priority financial or strategic returns?



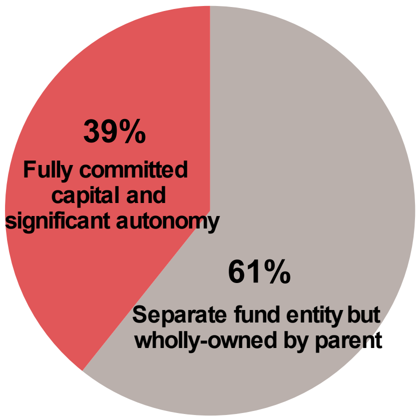
What is your investment methodology? More than one may apply



How is your vehicle structured?



If a fund structure, what type?



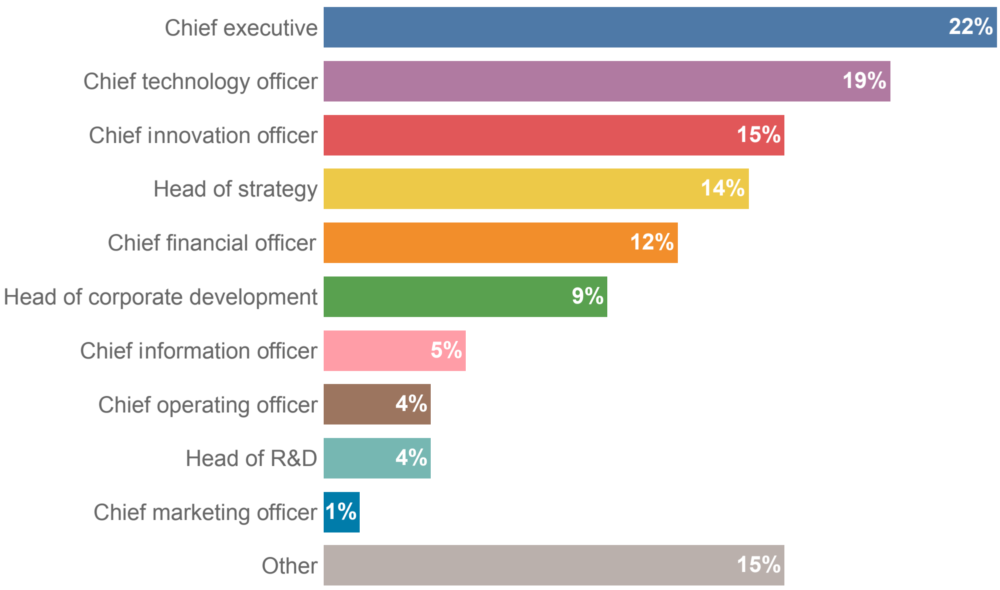
Structure

Most corporate venturers (66%) say they invest money in emerging businesses from the corporate balance sheet. Only a third (33%) of respondents say they have a separate legal structure, akin to a traditional venture capital firm, with general and limited partners.

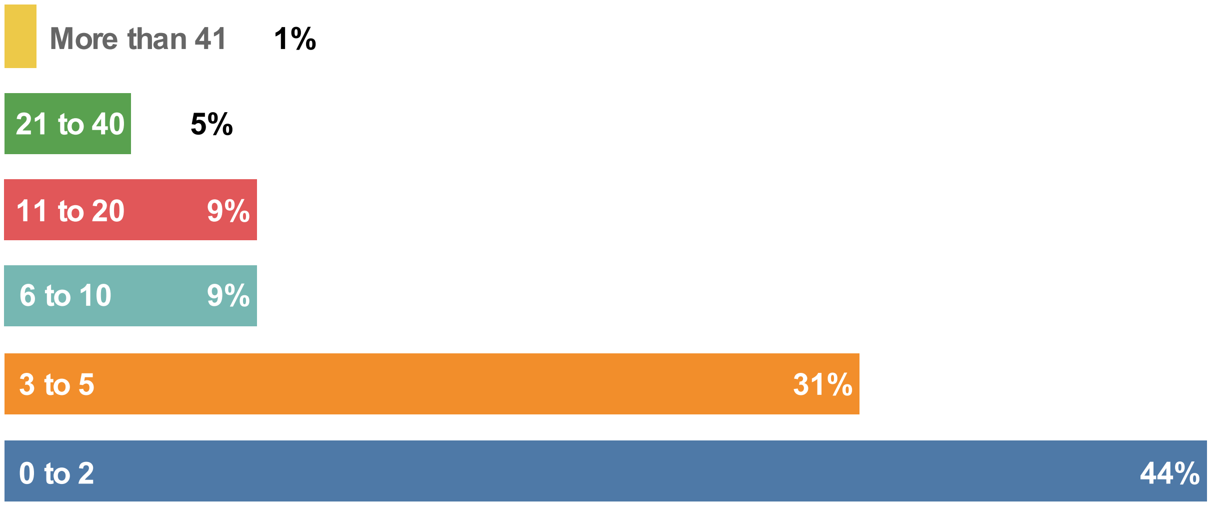
Of those who say they have a fund structure, 39% have a capital pool fully committed by their parent and significant autonomy, while 61% say they have a separate fund but the capital is wholly-owned by the corporate parent.

This reality is also reflected in the reporting structure of corporate venturing arms. Heads of venturing units most often report to the chief executive (22%), the chief technology officer (19%), the chief innovation officer (15%) or the head of strategy (14%).

To which C-level executive does the head of your unit report?



How many executives are in your unit?



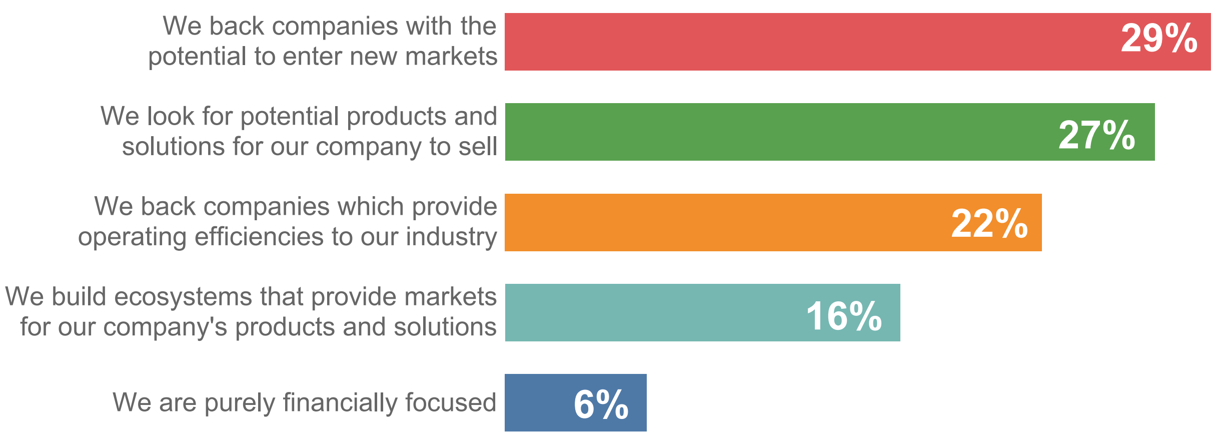
Thus, the presence of executives within the venturing units is limited – in 75% of them there are five or fewer executives – in 44% there are no more than two.

Strategic orientation

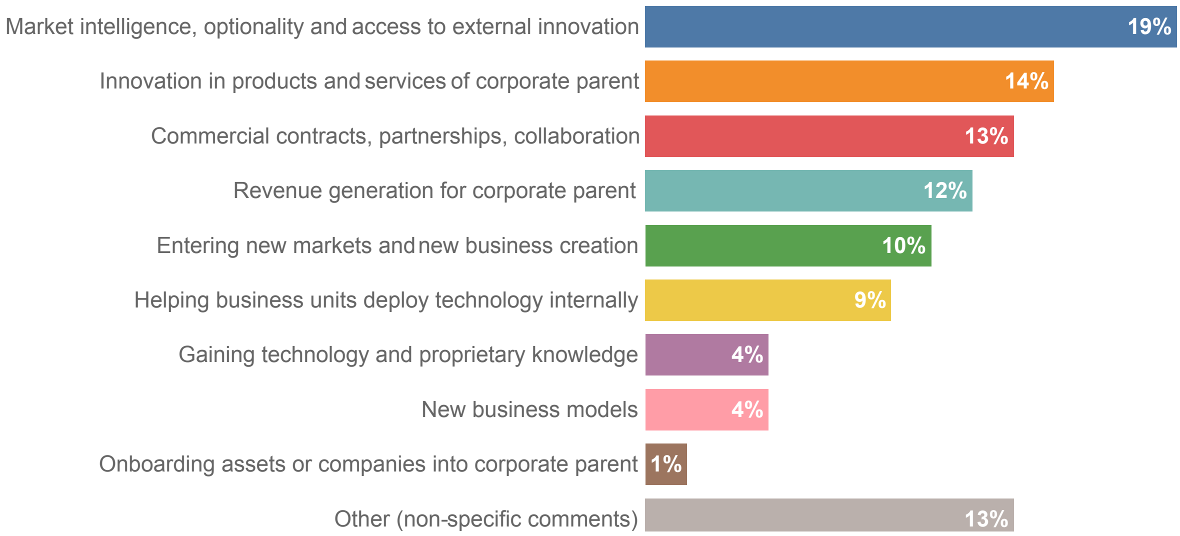
Given the weight of strategic considerations in most corporate venturing units, it is important to shed light on what those actually are.

When asked to select a statement best describing their investment focus, 29% of corporate venturers say they back companies that can help the corporate parent enter new markets, 27% say they seek potential products or solutions, and 22% claim to be scouting for companies that add value to the corporate parent by increasing operating efficiencies. Just 16% say they are building ecosystems around their parent's products or solutions, and only 6% claim to be purely financially oriented.

What best describes you as a corporate investor?



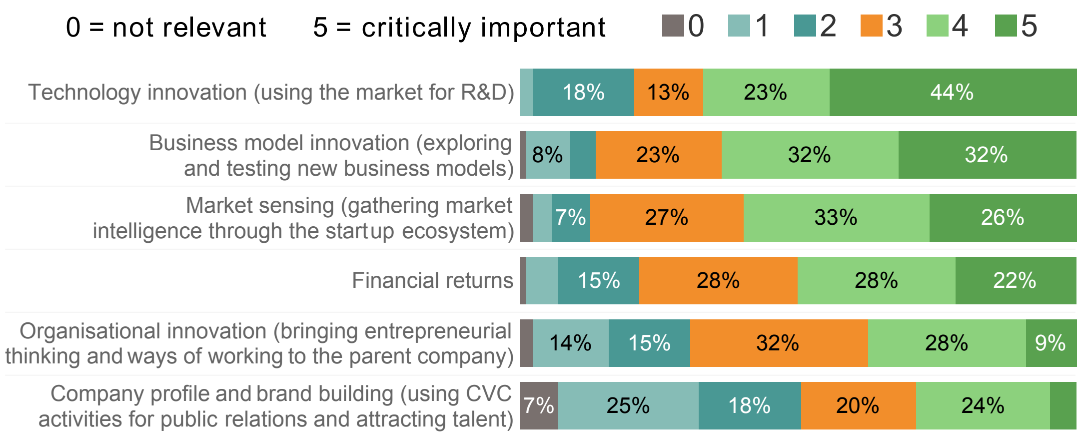
How would you define an important strategic return?



However, when asked to define "important strategic return" in an open-ended question, respondents give answers that are more nuanced. The number-one reason on the list has to do with gathering market intelligence, having optionality for a potentially disruptive technology or simply access to external innovation (19%). The second most cited reason is procuring innovation for the product or service offered by the corporate parent (14%). Striking commercial partnership and contracts with the startups is also important (13%) and so is helping the parent generate revenues (12%) by either increasing sales or other activities. Other important motives for venturing are entering new markets or creating new business (10%) as well as helping business units of the corporate parent deploy startups' technologies internally.

Respondents rating the importance of a set of value drivers give the highest scores on the scale – 4 and 5 – to technology innovation, defined as using the market for research and development, business model innovation and market sensing. Other value drivers, such as immediate financial returns from the startups, bringing entrepreneurial thinking into the corporate parent and using venturing unit activities for public relations and attracting talent, are given much lower scores.

What importance does your vehicle give to these value drivers?



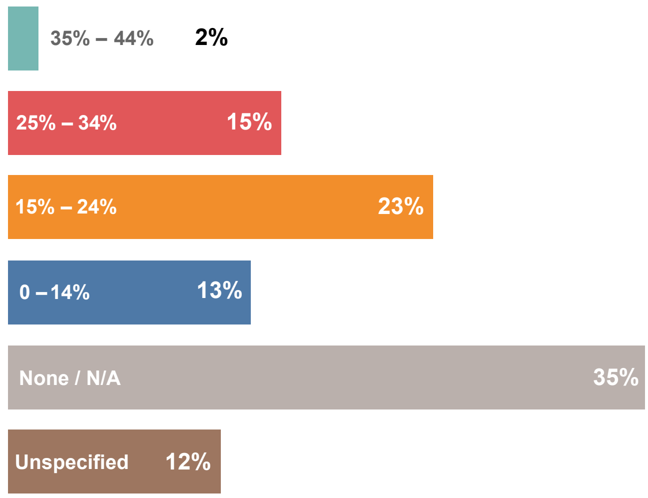
Expectations and portfolio structure

In addition to strategic considerations, it is interesting to examine what value corporate venturers expect their investments to deliver.

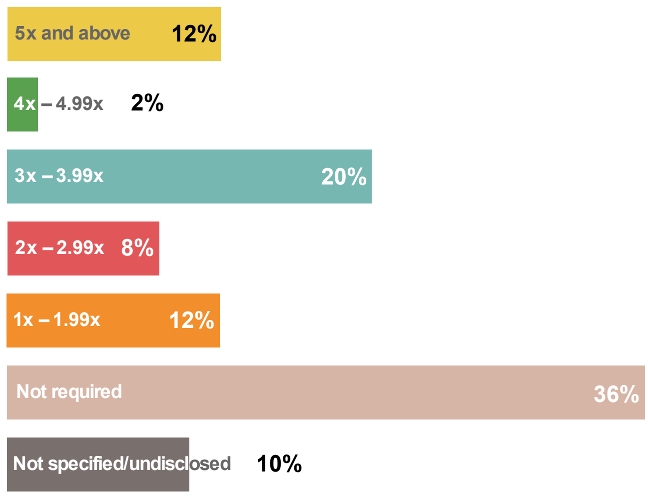
When asked about their required internal rate of return (IRR), 35% of corporates claim to have no requirement or target, 23% say they require from 15% to 24%, and 15% of corporate funds target an IRR from 25% to 34%.

The large number of corporate venturers that do not formally require or expect an IRR may be attributed to the heavier weight they give to other strategic considerations – those of a more qualitative nature. Reponses regarding required cash-on-cash multiple, also collected through an open-ended question, are similar and consistent with the stated IRR expectations.

What is your required IRR for an investment?



What is your required gross or cash-on-cash multiple for an investment?

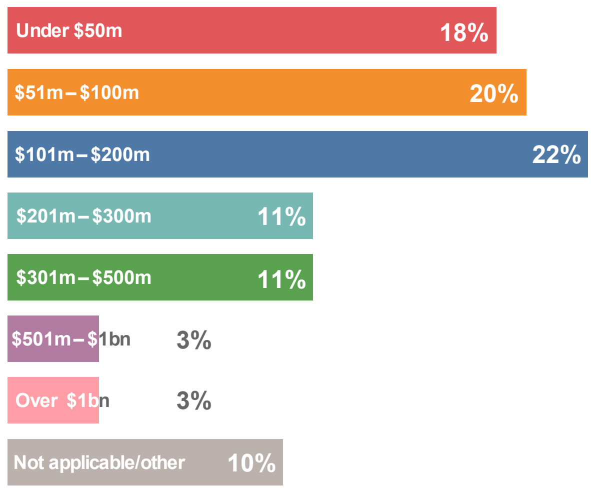


Capital deployment

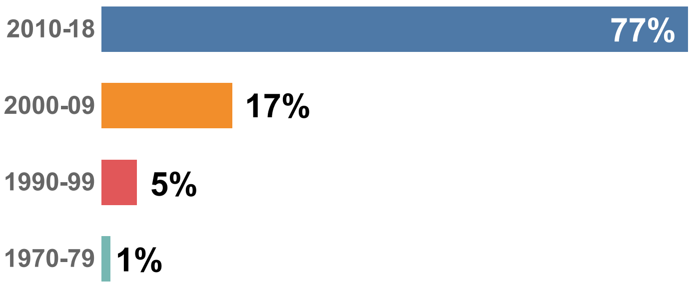
Among the most interesting facets of any investment business is how much capital it has at its disposal and how that capital is being deployed.

The fund size of most corporate venturing arms (60%) tends to range from below $50m to $300m, while 11% claim to hold between $301m and $500m in their coffers. A relatively small number of venturing arms have more than $500m or over $1bn.

What is your overall CVC fund size?



When was your unit set up?



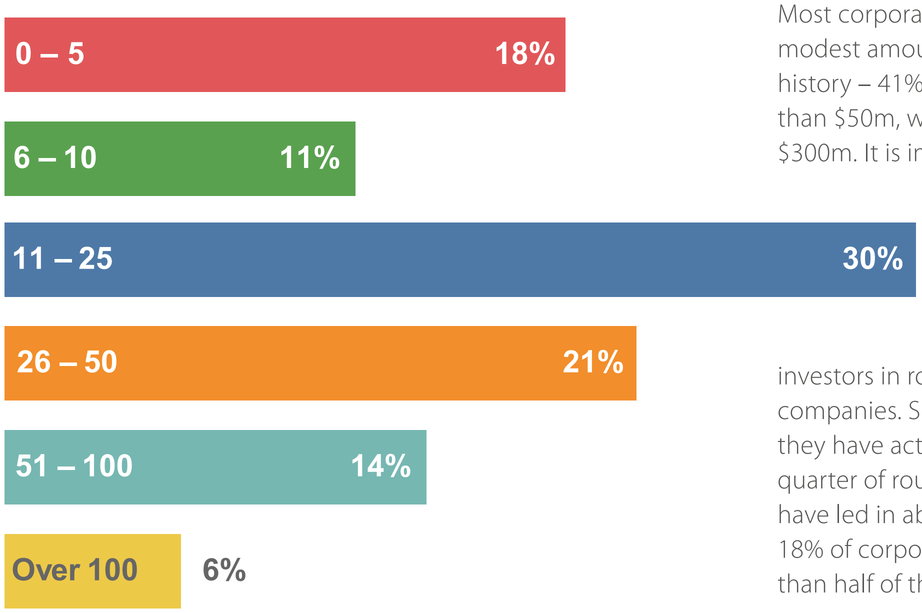
The key behind understanding patterns of capital deployment among corporates is to keep in mind that such investment vehicles are relatively young. More than three-quarters of respondents (77%) manage venturing units that have been founded within this decade, while 17% of units were launched in the 2000s.

With the exception of some old and well-established units, corporate venturing is still a relatively new investment phenomenon. This is why most respondents (69%) say they have backed anywhere from zero to 50 rounds but rarely above 50 or a 100.

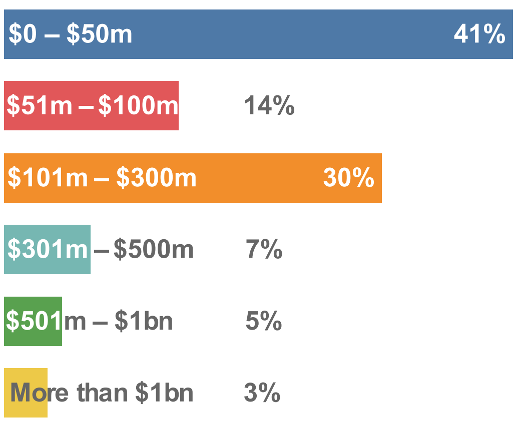
Most corporates have invested somewhat modest amounts of capital throughout their history – 41% claim to have deployed no more than $50m, while 30% say between $100m and $300m. It is important to note that there are, however, exceptions or outliers in the data, units that deploy billions on an annual basis.

This may also help explain why corporates are not often lead investors in rounds raised by their portfolio companies. Slightly more than half (51%) say they have acted as lead investors in less than a quarter of rounds they have backed, 31% of units have led in about half of their rounds, and only 18% of corporate venturers took the lead in more than half of their rounds.

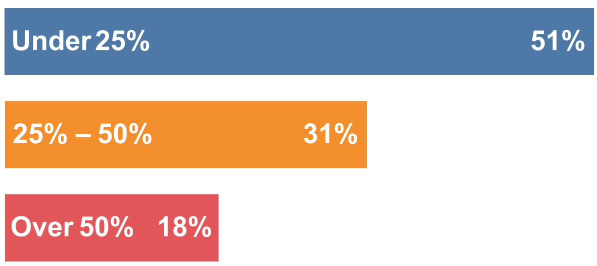
How many deals has your unit backed in its history?



How much has your unit invested in its history?

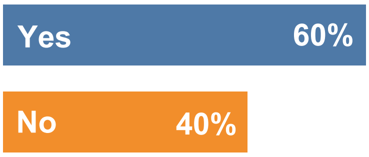


Of the deals your unit has backed, in what percentage did you lead?



Global Corporate Venturing

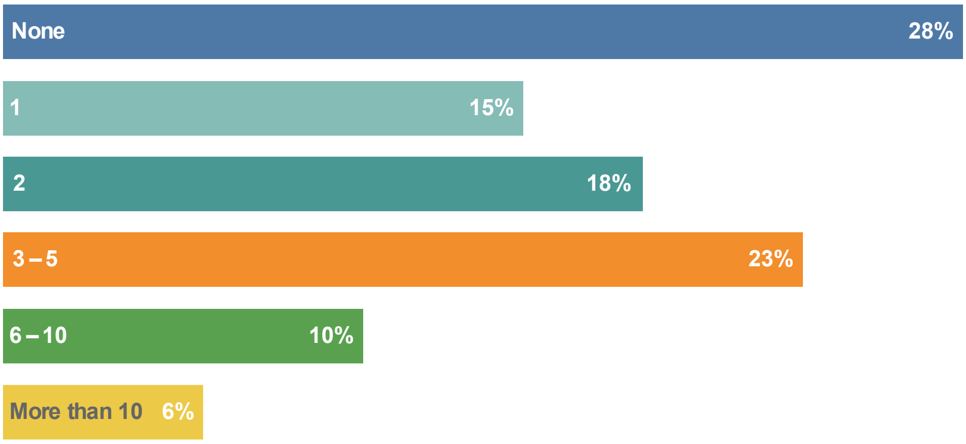
Do you invest in other venture capital funds?



For corporate venturers, the alternative to direct investments in enterprises is taking limited partner (LP) stakes in established venture capital funds. According to our survey, six out of every 10 surveyed corporate venturers take such stakes (60%). This figure has increased from last year, when we found that only about half (48%) take such stakes.

However, most corporates will typically hold no more than 10 stakes in such funds, while 28% say they have none. Many heads of corporate venturing units interviewed by GCV over the years have said repeatedly that they use LP stakes for a variety of reasons – as a way to diversify their portfolios, as a way to invest in verticals or geographies they do not know well, or simply as a tool to learn about venturing.

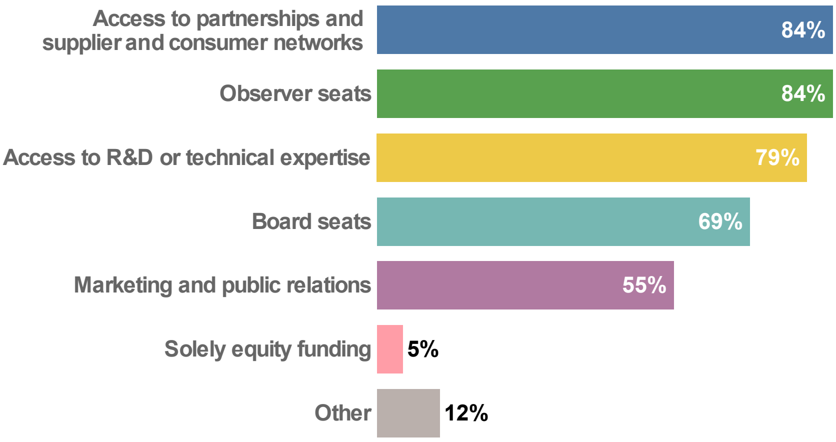
How many limited partner stakes do you hold?



Relations with portfolio companies

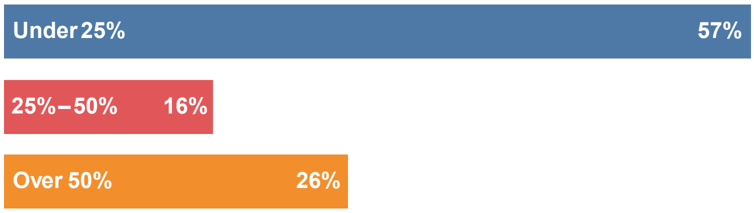
Unlike traditional venture capitalists, corporate venturers are in a unique position to understand and help their investees in a variety of ways. The most common, according to our survey, involves giving them access to partnership and supplier networks (84%), taking observer seats (84%), providing access to R&D and technical expertise (79%), taking board seats (69%) as well as providing assistance with marketing and public relations (55%).

How do you support your portfolio companies? More than one may apply

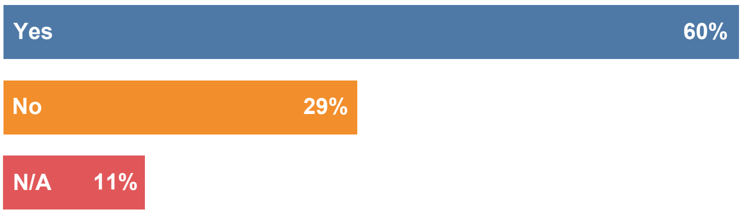


Of the deals your unit has backed, in what percentage do you take a board seat?

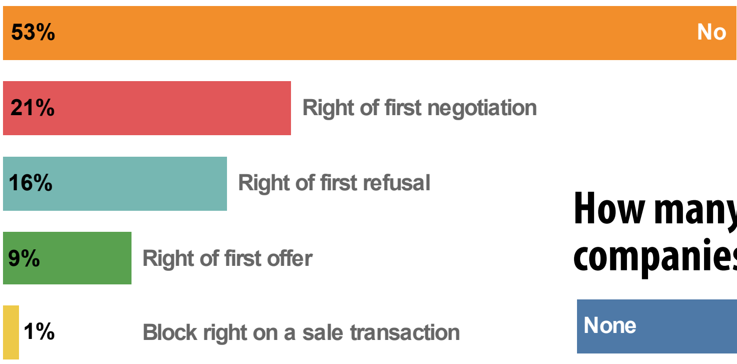
What percentage of your investments are tied to a partnering or commercial deal?



Do you help your parent's M&A team acquire venture-backed companies?



Do you seek specific rights in the sale of a portfolio company?

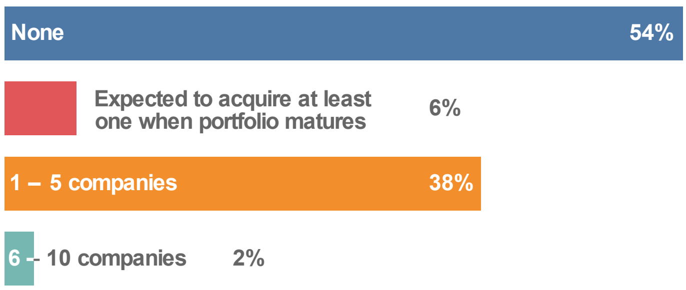


There appears to be a clear preference for observer seats over boards seats, perhaps because an observer seat is a more sensitive and unimposing approach to emerging businesses. Almost four in 10 (37%) corporate venturers say they take a board seat in fewer than a quarter of their portfolio companies, while 36% claim to have taken such seats in more than half of their investees.

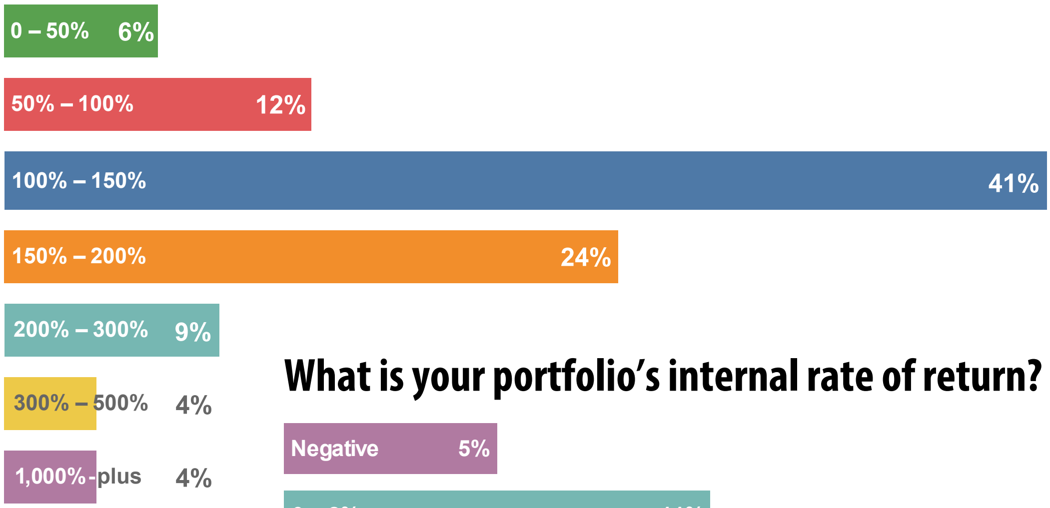
More than half of corporates (57%) claim that in less than 25% of cases their investment in a startup is tied to the completion of a partnership or some commercial deal, while 26% say such a condition is present in more than half of their deals.

Six out of 10 venturing units (60%) collaborate closely with the corporate M&A division in identifying and buying companies. In 47% of cases, their deals also involve conditions seeking to give the corporate parent preference in the sale of a portfolio company. However, in 54% of cases the corporate parent has never acquired a portfolio company and in another 38% it has bought between one and five such companies. Venturing arms, therefore, do not necessarily act as extensions of corporate M&A divisions.

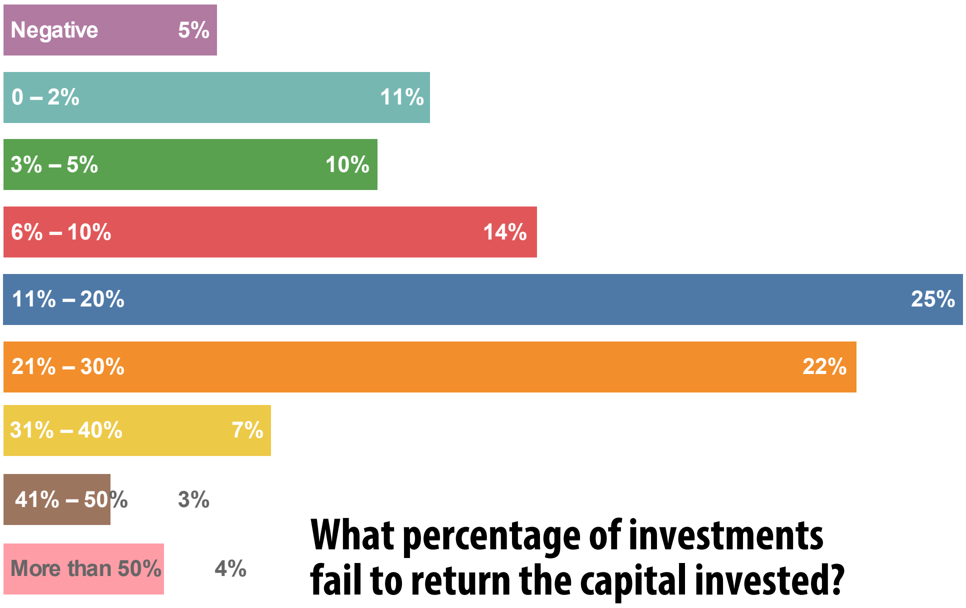
How many of your portfolio companies has your parent bought?



What is your portfolio worth as a percentage of original investment?



What is your portfolio's internal rate of return?



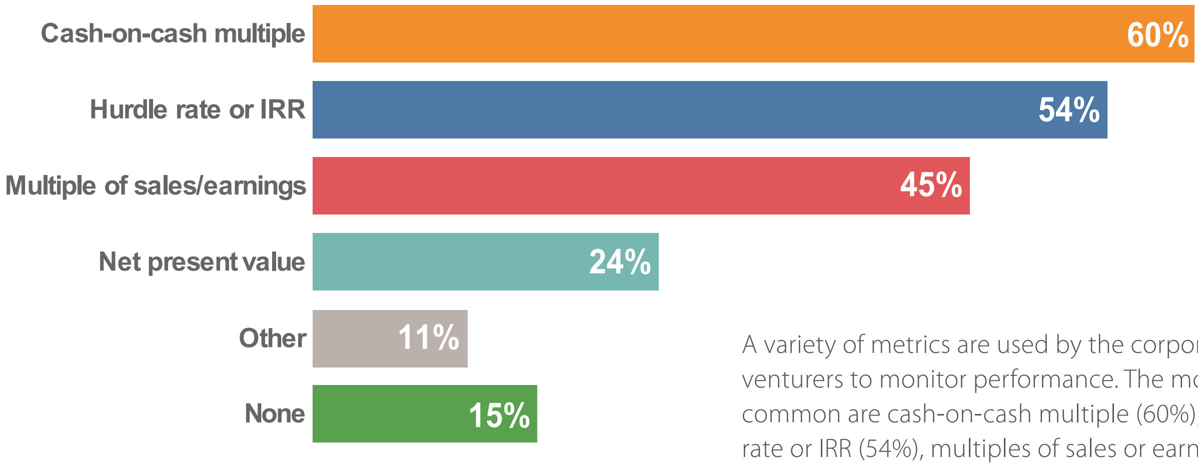
What percentage of investments fail to return the capital invested?

Metrics, performance and investment teams

Investment funds are judged on their performance and this also applies to corporate venturing funds. When comparing a portfolio's worth to net asset value by multiple, most corporate investors (65%) claim to stand at between 100% and 200%, while 61% of IRRs range between 6% and 30%.

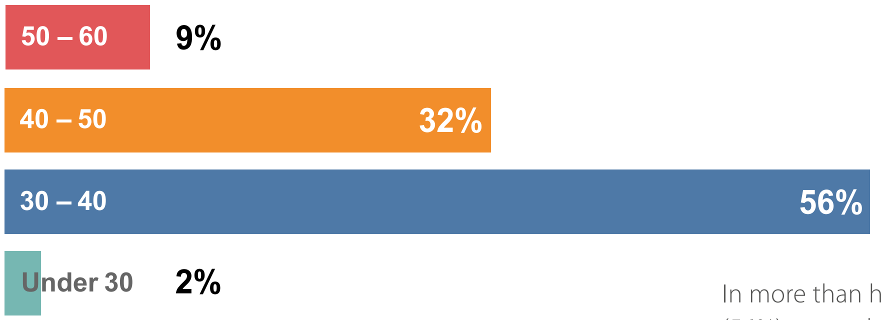
The venture capital business inevitably involves bad bets and losses due to the high degree of uncertainty and risk in startups. In such a business, the lower the number of bad bets, the better the overall performance of the fund. Most corporate venturers (77%) say the loss rate of their fund – defined as the percentage of investments that fail to return the capital invested – is 30% or lower. Theoretically, this could be the result of the industry expertise that corporate venture firms possess, presumably unlike their traditional venture peers.

What metrics do you use to analyse investments?



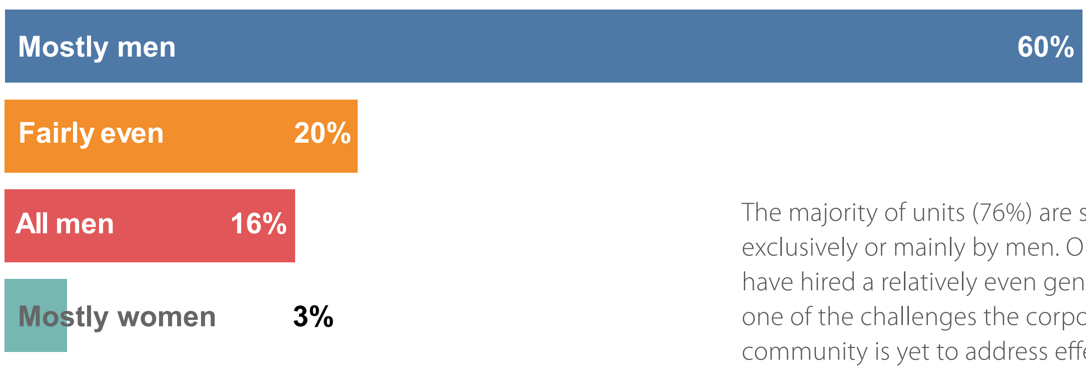
A variety of metrics are used by the corporate venturers to monitor performance. The most common are cash-on-cash multiple (60%), hurdle rate or IRR (54%), multiples of sales or earnings (45%) and net present value (24%).

What is the average age of your team members?



In more than half of corporate venturing firms (56%), teams have an average age of between 30 and 40 years old and in nearly a third (32%) between 40 and 50. Only 9% of firms say the average age of team members is between 50 and 60, and just 2% under 30. Corporate venturing seems to be a place for more experienced professionals.

What is gender mix in your team?



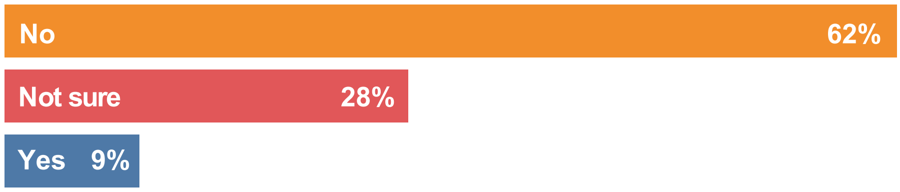
The majority of units (76%) are still populated either exclusively or mainly by men. Only 20% claim to have hired a relatively even gender split. This is one of the challenges the corporate venturing community is yet to address effectively.

Disruption of venture capital

In this edition of our annual survey, we included several questions dealing with a possible disruptor to the venture capital industry that has gained momentum – initial coin offerings (ICOs), powered by blockchain technology. Most corporate venturing respondents (62%) do not believe ICOs will disrupt the current model of funding portfolio companies, only 9% say the opposite and 28% say they are unsure.

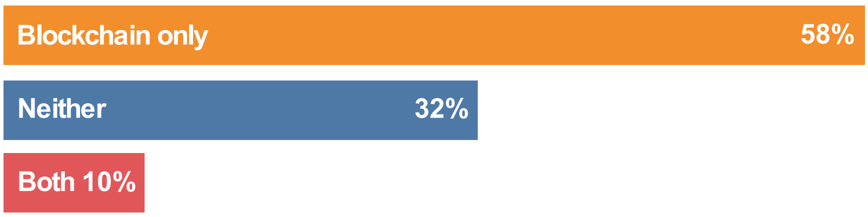
This is also reflected in their short and medium-term investment plans. More than half of respondents plan to invest in some form of blockchain technology over the next three years. However, only 10% say they intend to invest in both blockchain and ICOs within the next three years.

Will initial coin offerings and blockchain disrupt corporate venture models for funding portfolio companies?

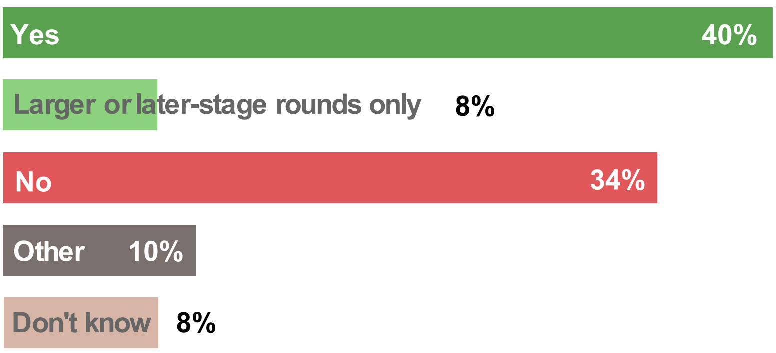


Will you be investing in ICOs or blockchain in the next year?

Will you be investing in ICOs or blockchain in the next three years?



Is the venture industry blurring with broader private capital markets, and the latter with public markets?



Finally, taking a broader industry perspective, we asked corporate venture capital firms about the blurring of venture capital with the wider realm of private equity and, subsequently, public markets. 40% of respondents agree this is an observable trend and 8% say it is trend only in larger and later-stage funding rounds, while 34% say there is no blurring of lines.

From the Thelander-PitchBook 2018 Investment Firm & CVC Compensation Survey

Thelander 2018 Investment Firm Report – CVC
CVC unit leader – senior corporate level executive
All reported data

CVC unit leader – senior corporate level executive	No of companies Reporting	Average	Minimum	25th %ile	Median	75th %ile	Maximum
2017-18 base	81	$326,571	$145,000	$250,000	$300,000	$368,000	$900,000
Bonus for performance 2017	73	$173,783	$20,000	$75,000	$125,000	$225,000	$900,000
2017 bonus % of base $	73	50.5%	7.5%	29.7%	39.2%	60.0%	200.0%
Total cash 2017-18	81	$483,189	$170,000	$315,800	$418,000	$589,000	$1,500,000
Projected 2018 bonus	70	$183,578	$25,000	$80,000	$125,000	$250,000	$750,000
2018 projected bonus % of base $	70	53.6%	8.3%	30.0%	40.4%	64.4%	254.2%
% interest carried	16	14.2500%	2.0000%	5.7500%	11.0000%	18.5000%	40.0000%

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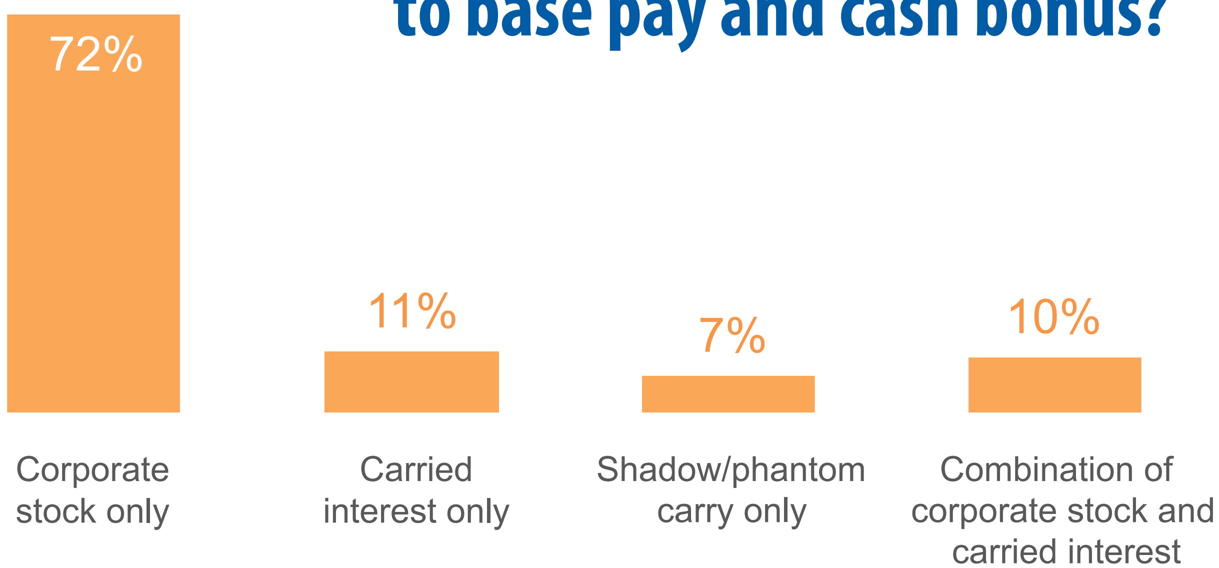
What are the other incentives in addition to base pay and cash bonus?



J Thelander Consulting and PitchBook

Open-ended questions

What would you define as an important strategic return?

Partnership that leads to commercial gain for both the portfolio company and our parent company.

Strategic partnership/collaboration.

Foresight and optionality.

Innovation sales. Accelerate entry in new markets.

A change in perception of our industry – TV – to digital natives broadly.

Improves the quality of patient's lives and/or caregiver work experience.

How many invesments/portfolio companies also resulted in some type of strategic partnership.

Business units look innovative.

The ability to deploy a technology into our existing asset base to generate incremental value.

Confirmation of the operating entities that the introduced startups are strategically relevant. number of open-innovation projects.

Bring new products faster and more efficient to market in cooperation with innovative tech companies, generating additional revenues and higher satisfaction from our customers.

Commercial relationship leading to business unit success.

Great make-money case for our business.

Enhancing technical knowledge and market insight into emerging fields.

Create options for future business.

Operational efficiencies and fit within a business segment.

Create opportunities to test and change the status quo of the market, from how it operates in production to distribution channels and customer experience

Diversification.

Onboarding assets or companies into our parent.

When we either embed the startup's technology in our own products/solutions, or we resell it.

Partnership with the parent organisation.

Insight into how are market is changing and evolving.

Proprietary knowledge that we could not get anywhere else.

Collaborations/licensing opportunities with our parent company; building strong networks of entrepreneurs around our parent company; brand recognition of our parent company as the preferred partner for innovation based startups; market intelligence provided by the investment teams to senior management.

Understanding the new sectors and trends.

New or future business models.

Learning and know-how transfer – signal generation.

Product integration.

It varies, but technology that makes the company more efficient, saves cost, makes money, opens a new market.

New business models and market knowledge.

To adopt new technology to improve business results or provide new capabilities.

New markets and new customers.

Exploring new market opportunities.

Access early on to new disruptive innovation.

Increase revenue, decrease cost, improve customer service and/or enhance safety for the parent company.

Creating a new product with a new technology platform that does the job of our parent's companies products.

Creating a new business.

Technology enablers.

To start new business project.

Collaboration.

Strategic leverage.

Awareness and possible utilisation of new technologies; new products; entering new markets.

We have to have a deal of some type or an intent to have a deal before we will invest.

Adoption through the corporate organisation of a technological and/or business model innovation.

Value creation via sales, cost reduction or R&D advancement.

Award of new contracts thanks to the differentiated technology brought by the startup.

Sales.

Sizeable distribution partner, capability we are a customer, acquisition candidate.

Resale revenue.

Technology innovation knowledge.

New products/services.

Increased sales revenue from an expanded and complementary product portfolio.

Support of local ecosystem, return is greater than or equal to internal cost of capital, technology scouting.

Learn how to better serve our customers.

Win-win situation for both companies. Strategic return is the capacity of the big company to add value to the startup and the value added from the startup to the big company; and that both businesses manage to grow in some way with the support of the other.

Leveraging evolving innovations for better product and service offerings leading to greater customer experience.

New capability in various products and stream lining.

Learnings from the testing of new business models.

Long-term security of markets, margins and revenue.

Significant improvement in quality of care that directly impacts revenue and profitability.

The simple measure of our success is the technologies from startups that we invest in today are used in our products or businesses of tomorrow driving greater revenue and profitability. Specific measures would include industry-first technologies developed by startups and implemented; completely new innovations implemented in current or new businesses that are supplied by startups; and innovations from startups that deliver cost efficiencies.

Business sponsor (line of business) value.

The ability to create new business models through aggregated innovation.

Potential new revenue sources (to invest in options of new products, new services or new business that could bring new alternatives of revenue sources for the corporation). We bet on potential new revenue sources to create an option to future aquiring. But we also invest in ecosystems providing markets and technologies.

Core business benefits from portfolio compny.

Business impact.

Create new business.

Technology insights.

Creation of a new industry, market, product or service.

Joint venture or product partnership.

Open-ended questions

Do you think the venture industry is starting to blur with the broader private capital markets (PCMs) of private equity and, in turn, PCMs with public markets?

Yes, we have more capital from various vehicles coming into venture. While some has backed off, the changing dynamics of what is seed, what is series A etc, had led to the blurring of lines.

Not sure. Still two different universes due to requirement for leverage – but PCMs might be looking enviously across and thinking about how they structure their next fund to not be dependent on leverage.

Yes in terms of joint venture work, there is a need to apply VC return metrics to a private equity cash deployment and operating model. Also, similar to SoftBank, arguably a private equity fund.

Yes, VC is now private equity.

No. They are taking different risks. Also the cheque sizes are different. Different businesses.

Not in our space of speciality materials investing.

Yes – seeing private equity firms start to play in more traditional VC rounds.

Blurring with public markets, see arrival of megafunds coming into late-stage VC game.

Yes. Private equity is moving into VC territory and some VCs are doing more private equity-type deals.

No, only in large investing rounds.

At the very top of the market (Uber etc) the lines are very blurred. But below that, the asset classes remain very different.

Yes, at later stages (series C and up).

This really is sector-specific. In healthcare/healthtech we do not see this, as all VC investments are still in non-revenue-generating companies, and we do not see private equity players enter. In other tech sectors, this might be different.

No, the capital amount is not comparable.

Yes. Most certainly the venture world and private equity world distinction is getting grey as private equity moves into the venture landscape. But we don’t see VCs (other than Softbank) moving the private equity way.

No. Hedge funds and others are doing less VC investing – it feels like, although I have not seen the data. With interest rates rising around the globe, I think more dollars will funnel out of the VC asset class.

Yes – SoftBank has substituted for many different sources of growth capital. The lack of publicly-traded tech unicorns means they are also substituting for public equity. This will shift in 2019.

Yes – seeing the big private equity and sovereign wealth funds support earlier-stage companies.

I don’t think so. Venture requires extensive technology know-how, as well as business management capabilities. Also, private capital markets will struggle to support innovation on the long run and hence solve our major social and environmental challenges.

Yes, early days. The large megafunds and investments by the likes of SoftBank are shifting the dynamic.

I don't think that is true yet.

Yes, but this is cyclic.

Nope – I think funding creativity will continue to increase but venturing will remain.

No, these are different things with different focus and strategies.

Concerns over conflicts are starting to arise with regards to capital inflows and CVCs could see some interesting litigations when things start to go south.

No, the asset classes will remain distinct.

Private equity funds are currently moving into the venture space to put capital to work, including paying multiples in excess of CVC multiples. Unprecedented in my opinion. May be a moment in time due large capital allocation to private equity. In turn, private equity multiples have become an alternative to public markets.

Based on what I read in the news, yes. However, those stories are more likely the exception rather than the rule.

Although it blurs with trend topics (AI, blockchain), specific and complex technology developments are still requiring a deeper expertise so that the actors remain a smaller group.

Yes. Consider the following. There are now firms like SoftBank that are writing cheque sizes for growth-stage startups that are more consistent with private equity. There has been strong growth in CVCs over the past five years and many of them are focused on later stage rounds (C, D) rather than series A and B. Startups that would normally have filed for an IPO based on their valuation and revenue are still being privately funded. There are now firms that are focused on seed-stage startups and often writing larger cheque sizes at higher valuations than the traditional family-and-friends funding levels. Those developments are definitely creating blurring.

Yes, we already see some sovereign funds placing some IPO opportunities. There will be harder competition for good investment opportunities. This kind of overlap is healthy in my opinion, creates more diversity.

Yes, especially with super-funds like SoftBank playing.

Yes. Increasingly the distinguishing lines are less and less clear. And companies are staying private much longer thanks to the megafunds over the past two years.

BEST PRACTICES IN CORPORATE VENTURE

BENCHMARKING ELEMENTS OF PROFESSIONALLY RUN PROGRAMS

Scott Lenet, president, Touchdown Ventures

Corporate venture capital professionals face a fundamental time pressure – the average corporate venture capital program lasts only four years, according to a 2017 Insead study, but the average time to exit for venture capital investments is more than six years, according to PitchBook.

Clearly, the C-suite and board of directors do not have patience for the average corporate venture capital program to show financial results. How can CVC investors and innovation professionals manage their programs through this challenge? What does it take to beat the averages, when CEOs are understandably focused on next quarter's earnings?

One potential solution is to focus on running a professional program, showing that your innovation team understands the rules of the venture capital game and is prepared, organised and thorough. These values logically resonate with corporate executives far more than cowboy approaches that might be stereotypically associated with venture capital. If you have to choose between a thoughtful plan and winging it, the former is probably a better bet when it comes to inspiring confidence in your financial sponsors.

Ironically, while venture capitalists specialise in analysing business plans, few bother to focus on their own plans. To address this gap, we have identified 68 elements of running a corporate venture capital effort that we believe are best practices, based on our decades of experience in the industry and having launched and run more than 15 corporate venture capital programs.

As an example, most professional venture capitalists build a model portfolio prior to investing. A model portfolio is a budget that takes into account fund size, investment stage preferences, reserves for follow-on investing, and many other interrelated factors. This is important, because failure to model the portfolio can result in accidental overinvestment, which in turn can result in uncomfortable discussions with senior management when a target $50m program balloons to $75m because of lack of discipline. Adhering to the best practice of portfolio modelling may be one way to help ensure the longevity of your corporation's venture capital program.

As a resource for attendees at the Global Corporate Venturing & Innovation Summit, here is a checklist of our 68 elements for benchmarking your corporate venture capital program against best practices:

1 Goals and objectives

1.1	Strategic value	Clear statements describing the strategic objectives for the program
1.2	Strategic value KPIs	Quantifiable strategic metrics to measure the success of the program
1.3	Financial return	Quantifiable financial metrics to measure the success of the program
1.4	Capability & learning	Clear statements describing what the corporation wants to learn
1.5	Timing	A timeline for achieving each of the program's goals

2 Strategy

2.1	Sector	Industry sector focus areas are specified
2.2	Stage	Company stage focus is specified
2.3	Geography	Geographic focus is specified
2.4	Budget	Amount available for investment over a specific time period
2.5	Investment size & pace	Average dollars per investment and number of investments per year
2.6	Reserves allocation	Amount reserved for follow on rounds in portfolio companies, expressed as a multiple of the original investment
2.7	Governance	Specific guidelines for board roles, observer rights, major investor status, information rights, and reporting
2.8	Lead vs follow	Specified preferences for leading or following rounds
2.9	Control vs syndication	Specified preferences for controlling or syndicating rounds
2.10	Target ownership	Range of ownership percentage desired in portfolio companies
2.11	Target return profile	Target cash-on-cash multiple or internal rate of return on investments
2.12	Internal consistency	Elements of strategy do not contradict each other
2.13	Annual review	Strategy is revisited annually and adjusted (as needed) to reflect changes in the business, the market, and strategic priorities

3 Infrastructure

3.1	Model portfolio	Shows how the budget will be deployed between new deals and follow on investment, including new and follow-on deals each year
3.2	Entity	Legal entity that wires cash to portfolio companies is set up to do so
3.3	Accounting method	The investing team has specified which accounting method to use to track investments (cost, equity or mark-to-market)
3.4	Ledger	Record of all transactions, including type of security, date of transaction, and amount of transaction
3.5	Back office	A team, either within the corporation or outsourced, that owns cash inflows and outflows, with standard procedures to govern them
3.6	Legal resources	The investing team works with a lawyer or law firm experienced with venture capital term sheets

4 Dealflow

4.1	Database	The investing team maintains a database for tracking leads
4.2	Dealflow targets	The investing team has set a target for the number of leads at each stage of the funnel per year
4.3	Funnel process	The appropriate proportion of leads moves through each stage of the dealflow funnel
4.4	Co-investor target list	List of 25 or more co-investors who focus on similar sectors
4.5	Partner meeting	The investing team meets regularly to discuss leads, deals in diligence and portfolio companies
4.6	Strategic fit	Leads and meetings match the investment program's stated strategy

5 Deal evaluation

5.1	Due diligence request list	A standard list of requests that can be tailored to each company
5.2	Team references	A standard questionnaire for management reference calls
5.3	Customer references	A standard questionnaire for customer reference calls
5.4	Competitive analysis	Process for identifying and analysing a competitive landscape
5.5	Financial analysis	Templates for analysing a potential investment's financials
5.6	Returns analysis	Templates for calculating expected return in various scenarios
5.7	Capitalisation	Templates for building pro-forma capitalisation tables
5.8	Risk evaluation	Frameworks for identifying and analysing the key risks in a deal
5.9	Thoroughness	Spend 100-plus hours on diligence before completing a transaction
5.10	Investment committee presentation	Synthesised materials that describe the investment thesis and diligence performed, including analysis of the opportunity

6 Transacting

6.1	Standard term sheet	A standard term sheet used as a starting point for negotiations
6.2	Conformity to market	Do investment terms conform to the current VC market standards?
6.3	Separation of terms	Are investment and commercial deals separate legal agreements that do not depend on each other?
6.4	Investment committee	A group of executives that approves investment decisions through a clear process
6.5	Success rate	Do 80%-90% of term sheets lead to closed transactions?

7 Managing

7.1	Fundraising Assistance	The investing team helps portfolio companies build their fundraising materials or makes introductions to potential investors
7.2	Syndicate Communication	Do board members regularly communicate with other investors in the syndicate?
7.3	Board Director Training	Executives without private company board experience are provided with resources to help them carry out their responsibilities

8 Commercial relationships

8.1	Commercial Relationship Monitoring	Processes that allow the venture capital investing team to monitor commercial relationships with portfolio companies
8.2	Standard Term Sheet	Standard terms for each type of commercial deal the corporation might implement with a startup
8.3	Commercial Deal Framework	Aligning commercial transactions to the program's stated goals
8.4	Commercial Deal Post-Mortem	Framework for analyzing commercial relationships after they have concluded, to ensure learnings are captured
8.5	Operating Relationship	The desired type of commercial engagement and timing of execution of engagements with portfolio companies are defined as a policy
8.6	Champions	The investing team has identified champions within business units to engage with startups commercially

9 Internal communications

9.1	CEO Support	The CEO actively supports the investment program
9.2	Key Stakeholders	Corporate executives have been identified who are key to the success of the investment program (including in business units)
9.3	Reporting	Regular reporting on portfolio performance and activities of the venture capital program for key stakeholders
9.4	Knowledge Sharing	Regular reports or meetings sharing venture capital team learnings
9.5	Sector Summits	Qualified, curated startups present to key executives
9.6	Coordination	Coordination with other innovation program teams (M&A, corp dev)
9.7	Advisory Committee	Operating executives serve as advisors to the VC effort

10 External communications

10.1	PR Policy	Elements of the program that can be discussed in the press are clearly defined
10.2	Deal Announcements	A policy regarding announcement of investments or commercial partnerships with portfolio companies is clearly stated
10.3	Website	Does the effort have a website with key information like sector focus, stage focus, and contact?
10.4	Ecosystem Messaging	Key messages for entrepreneurs and venture capital firms

A thorough benchmarking exercise should review information about your program's strategy and practices, and include interviews with your corporation's innovation team. A good benchmarking process applies not just to venture capital investment funds, but to all forms of innovation program, including internal product development, business development with startups and established companies, and mergers and acquisitions.

Benchmarking against best practices can be useful for new corporate venture executives trying to get their programs started on solid footing. It can be equally useful for established CVCs who need to demonstrate to the C-suite that the program is run professionally and seeks continuous improvement with a focus on delivering relevant results for the parent corporation.

Benchmarking is a sign of professionalism that not only looks good, but also should reduce your program's reliance on lucky breaks to deliver longevity. For any corporate innovators, benchmarking can be a smart discipline to measure your program's processes against what has worked for others before.

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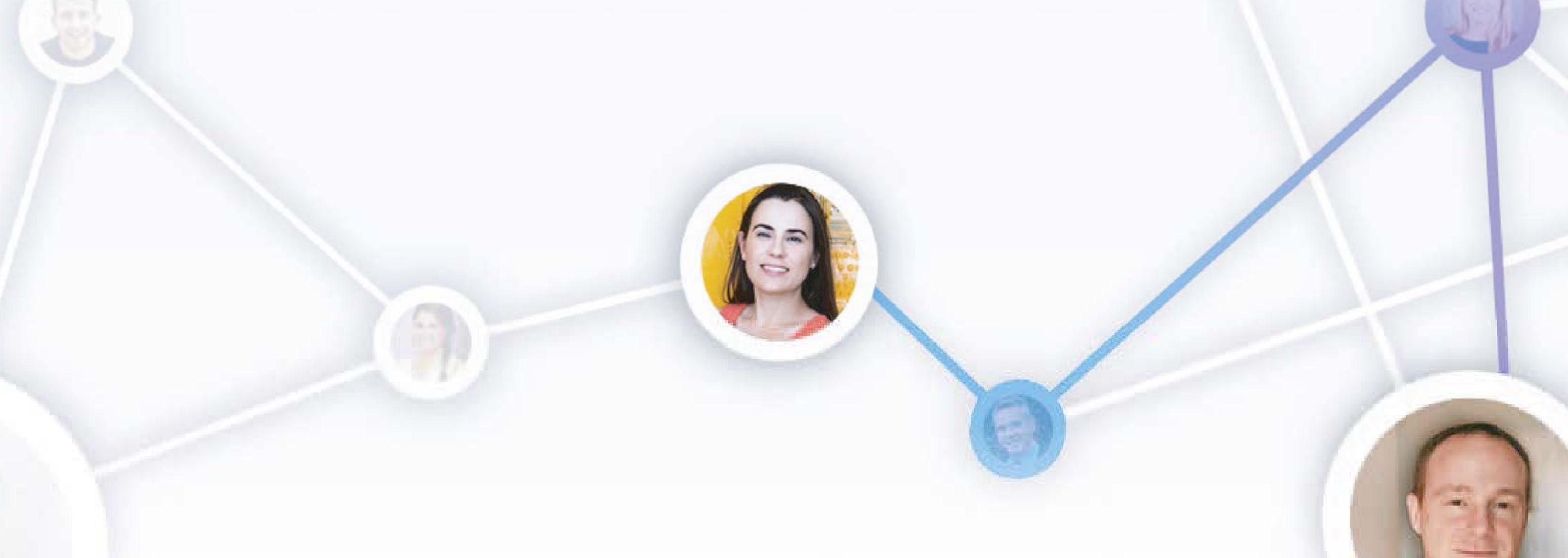

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