

Global

Corporate

Venturing

Media sector metamorphosis



INSIDE

Israel's
ecosystem
blooms

GUV Awards
nominees

Last month's
venturing
in depth

Contents

- 3 Editorial:** Growth benefits generations
- 4 News**
- 12 Sector focus:** Continuing metamorphosis of the media sector
25 Comment: Why Meituan-Dianping's expansion makes sense
- 26 Comment:** Entrepreneurial success and CVC: unravelling the paradox
Tom Edwards, Pace University
- 27 Gaule's Question Time:** Eight-year review
- 32 Innovative region:** Israel – 10 years on, what is the status of the 'startup nation'?
40 FuturX – an IAA initiative aiming to retain innovation
- 41 University Corner:** GUV Awards 2018 nominees
- 42 Government House:** Dawn closes \$232m fund with EIF support
- 43 Analysis:** Last month's venturing activity

Global Corporate Venturing

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EDITORIAL

Growth benefits generations

James Mawson, editor-in-chief



The world has enjoyed a remarkable period of economic growth for as long as most people still working have been alive. A glance at the annual percentage growth in global gross domestic product (GDP), according to the World Bank, shows positive change in every year bar one (2009) since 1961. Demographic change, globalisation and technology have combined to make more people wealthier than ever before. Arguments about the value of GDP as a metric or relative inequality aside, it has been a boon for many people.

Rising GDP and population growth in most countries has been a positive tail wind for the media industry, too. A look at the main US-based media companies' market capitalisations over the past 20 years of the internet would seem to assuage the initial fears of their demise or disruption by the new economy.

A glance back to 1997-98 and AT&T was \$75bn then compared with \$230bn at the end of February, Time Warner was \$18.2bn versus \$74bn now, Disney was \$54.3bn (\$165bn now), Verizon \$58bn (\$200bn), Lionsgate/Starz \$72m (\$6bn), Cox \$729.7m (\$34bn, according to Recode analysis), and Comcast was about \$25bn but is now about \$184bn. Their corporate venturing groups, where active, are some of the largest and most respected in any sector and have been part of the large value creation seen by their parents.

But what of the techies? Apple was \$2.7bn in market cap when Steve Jobs returned in 1997 but in late February was at \$908bn and is widely expected to reach \$1 trillion. Google had just been launched in 1997 and was \$794bn in February, while Amazon had floated then at a \$438m market cap and was \$736bn recently, and Facebook was probably not even an idea in Mark Zuckerberg's head but is now worth about half a trillion dollars.

Add in Microsoft, as its \$26bn LinkedIn purchase in 2016 pushes it further into media, and these five companies are worth about as much as the rest of the US media sector. Then factor in Chinese techies' market caps. Tencent was launched in 1998 and is also worth more than \$500bn. Similarly, Baidu and Alibaba and Toutiao are reshaping the media landscape arguably more than most traditional media companies.

The value creation in media has been flowing mainly to new groups while the established have also risen, just less dramatically.

Richard Waters at the Financial Times last month argued that while the stock market values of Amazon, Google parent Alphabet and Microsoft were all within a percentage point of each other, at close to \$740bn, "there has been no shortage of analysts available and willing to make a case why each of these companies is on course to hit the \$1 trillion mark sooner rather than later".

He added: "A platform shift is under way in the tech world, and it is being led by companies other than Apple. The mobile revolution that was touched off by the iPhone is 11 years old. The computing era is coming into sight. It is one that depends heavily on the cloud, with artificial intelligence (AI) the driving force behind the next generation of advanced applications.

"Between them, Amazon, Microsoft and, more recently, Google, have seized leadership in this area [from a US perspective]. Led by Google, these companies have also developed the strongest capabilities in AI. It is not clear who the biggest winners in the AI era will be, or where the most value will be created. But there is a good chance that, before it is over, it will give rise to at least one trillion-dollar tech company."

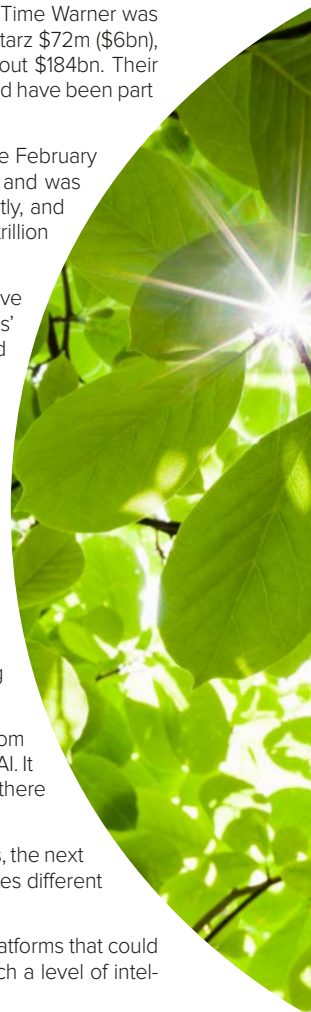
While it can hardly be said that traditional media companies have been left behind by the past 20 years, the next few decades could see them in a different league from those that do grasp the AI mantle, which creates different strategic challenges for all parties.

Japan-based SoftBank, using its near-\$100bn SoftBank Vision Fund, has pushed hard into the tech platforms that could drive and benefit from AI and the general push towards singularity – a moment when machines reach a level of intelligence that exceeds that of people.

Separately, Naspers, a South Africa-based media company that invested in Tencent a few years after its formation, is now arguably more of a diversified e-commerce, media and education company given some of its recent investments. Its valuation might still fail to include all its underlying assets, but compared with its R132.5m (now \$10.7m) market cap at its April 1994 flotation, Naspers at R1.34 trillion now is exponentially more valuable.

The importance of venture to strategic decision-making means one thing is clear – there will be more activity. Bob van Dijk, CEO of Naspers, for the GCV Powerlist 100 nomination process, said: "Naspers looks to invest in entrepreneurs around the world that are building leading businesses addressing big societal needs. Naspers Ventures, led by Larry Illg, has invested in several new segments for us doing just that. The new areas of investment include education, food, health and agriculture, and continued investments in some of these segments will help to build the future of Naspers." ♦

The value creation in media has been flowing mainly to new groups while the established have also risen



NEWS

Qiming catches Mayo Clinic for \$935m fund

China-based venture capital firm Qiming Venture Partners has closed a \$935m fund, securing capital from limited partners including medical practice and research group Mayo Clinic.

Qiming Venture USD Fund VI's investors include Princeton University, Massachusetts Institute of Technology and Duke University as well as superannuation fund NGS Super, Commonfund, Hall Capital Partners and Dietrich Foundation.

The vehicle was announced alongside two other funds – Chinese yuan-denominated Qiming Venture RMB Fund V (Qiming RMB V), which has attracted RMB2.1bn (\$334m) 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.

Qiming RMB V's backers include conglomerate Xiamen C&D Corporation and CDB Capital, a subsidiary of financial institution China Development Bank, as well as Oriza FOFs, China International Capital Corporation, Suzhou Fund, Lupu Investment and Hang Tang Wealth.

Qiming Venture Partners now has more than \$4bn under management, spread across 12 funds. Mayo Clinic previously backed its \$500m Fund IV in 2014 alongside various university and institutional investors.

Baidu begins \$500m fund

China-based internet group Baidu has formed \$500m growth-stage fund Changcheng Investment Partners to back internet and artificial intelligence (AI) technology developers, the Paper has reported.

The \$500m figure represents the fund's first phase, according to the Paper, though it did not reveal plans for a final close, nor whether Baidu was providing the entirety of the capital. Li Xinzhe, Baidu's former chief financial officer, will run the fund as chief executive. Changcheng will, however, operate as an independent entity, and will invest an average of \$20m to \$30m in each deal. Its formation follows Baidu's launch of two other funds, Baidu Ventures and Baidu Capital, in 2016. Formed with \$200m, Baidu Ventures funds AI technology developers at seed to series B stage, while Baidu Capital, which concentrates on growth and late-stage deals, has more than \$3bn of capital from which to invest.

Although it has not invested as frequently as Tencent or as extravagantly as Alibaba, its other chief rival in China's internet space, Baidu has been an increasingly frequent participant in venture capital, particularly in the AI and autonomous driving sectors. Its most notable investments include Nio, a smart electric vehicle developer valued at \$5bn as of November last year, and on-demand ride service Uber China, for which it led a \$1.2bn round in 2015 before its \$7bn acquisition by Didi Chuxing.

Sofinnova launches \$340m fund

VC firm Sofinnova Partners has launched a €275m (\$340m) fund with commitments from insurance provider CNP Assurances and an undisclosed China-based biopharmaceutical company. Limited partners include French state-owned investment bank BPIFrance, which put in cash directly and through the Investment for the Future program, Danish government-owned investment vehicle the Danish Growth Fund, family offices, such as Fidim and

KCK, and other unnamed entities.

Sofinnova had originally targeted a €250m close for Crossover Fund I, which will focus on the biopharmaceutical and medical device sectors. It aims to invest in about 15 late-stage private and public companies, with 80% of capital going to Europe-based businesses. The remaining 20% of investments will be made outside Europe, with a focus on North America.

NTT makes \$188m corporate venturing call

Japan-based telecoms firm NTT Group is looking to create a ¥20bn (\$188m) third corporate venturing fund in July this year, it has announced.

The fund, NTT Investment Partners (NIP) Fund III, will be managed by NTT Docomo Ventures, the corporate venturing unit operated by NTT Group's mobile network subsidiary, NTT Docomo. NTT Group and NTT Docomo Ventures will back the fund alongside the corporate's financial services arm, NTT Finance.

The fund will focus on sectors such as artificial intelligence, robotics and security, and will aim to drive expansion of NTT's global business operations and access cutting-edge research and development. The fund will aim particularly to support NTT's business growth in an area known as business-to-business-to-x, where a provider offers digital services to a wide range of end users including consumers, enterprises, suppliers and partners.

The vehicle will follow NIP Fund I, launched in 2008 with \$147m under management, and NIP Fund II, deployed in 2014 with \$98m in commitments. NIP Fund III has a management period of 12 years.



NEWS

Bayer and UC Davis seed agtech incubator

University of California Davis (UC Davis) and pharmaceutical firm Bayer have jointly launched the Crop Science CoLaborator incubator for agriculture and food-tech related businesses.

The incubator will occupy 3,000 square feet at Bayer's Innovation Hub for Crop Science in West Sacramento, with enough adaptable floor space for eight to 10 researchers and essential equipment for agtech operations. Local public-private partnership Greater Sacramento Economic Council will reportedly help identify agtech startups suited to the incubator.

Bayer will join UC Davis's incubator network, Distributed Research Incubation and Venture Engine, which is managed by the university's Venture Catalyst commercialisation arm. The UC Davis space joins two other CoLaborator facilities – one at Bayer's R&D facility in Berlin and another at a hub in San Francisco underpinned by Bayer's long-term agreement with UC San Francisco.

Idinvest gets \$222m intake for new fund

Idinvest Partners, a France-based growth equity firm backed by several corporate investors in the past, has raised €180m (\$222m) for the first close of its latest fund.

The firm did not disclose which investors provided capital for Idinvest Digital Fund III, its third digital-focused fund, revealing only that they consisted of "a number of

existing and new European limited partners", including some corporates. It has targeted €300m.

Idinvest's past corporate backers include networking technology manufacturer Cisco, insurance group Allianz, media company Lagardère and marketing and public relations firm Up Group

BBVA sends \$50m to Sinovation Ventures

Financial services firm BBVA has agreed to commit \$50m to Sinovation Fund IV, a \$500m fund being raised by China-based venture capital firm Sinovation Ventures.

Founded in 2009, Sinovation manages a total of about \$1.7bn in assets across six funds. Its exits include bicycle rental service Mobike, which agreed to a \$2.7bn acquisition by Meituan-Dianping earlier this year, and image-sharing app Meitu, which floated in a \$600m IPO in 2016.

Sinovation Fund IV is concentrating on artificial intelligence-equipped technology and will consider investments in business-to-business, education and online consumer product developers.

BBVA said the investment would give it access to the Chinese technology market as well as artificial intelligence technology, which it expects will power banking tools in the coming years. It is also open to co-investing with the firm in China-based companies.

Spain-headquartered BBVA formed \$100m financial technology fund BBVA Ventures in 2013, before transferring those assets, along with another \$150m of capital, to VC firm Propel Venture Partners in early 2016.

Ripple transfers \$25m to Blockchain Capital

Blockchain-based financial technology developer Ripple has revealed it has provided \$25m for US-based venture capital firm Blockchain Capital's Blockchain Capital Parallel IV fund.

The capital was supplied by Ripple in the form of its proprietary cryptocurrency, XRP. Parallel IV closed at \$25m last month alongside the \$125m Blockchain Capital IV fund according to regulatory filings, bringing the total raised to \$150m.

Ripple operates a currency exchange and remittance platform that relies on XRP to process payments in real time. It has raised \$90m to date, most recently closing a \$55m series B round in 2016. Investors in Ripple include exchange operator CME, data storage provider Seagate Technology, professional services firm Accenture, internet technology group conglomerate Alphabet and financial services firms Standard Chartered, Siam Commercial Bank, SBI and Santander.

Blockchain Capital will focus on investments in blockchain technology but will not limit its investments to specific verticals within that area.

Ripple expects its commitment will help it identify entrepreneurs and companies relevant to its own business, including developers that rely on technology such as XRP. It is the first time the company has invested in a fund.

Patrick Griffin, Ripple's senior vice-president of strategic growth, said: "This is the first fund that we have contributed to, and it will not be the last. We plan to be major players in shaping the future generation of blockchain or crypto companies."



NEWS

KDDI and Global Brain connect for \$187m fund

Japan-based telecoms firm KDDI has formed a fund of funds in partnership with venture capital firm Global Brain that plans to invest ¥20bn (\$187m) in the next five years.

KDDI Open Innovation Fund 3 was established to back VC funds whose investments could achieve synergy with KDDI as it prepares for the global rollout of 5G, the next generation of mobile networking. Areas of interest for the fund include the internet of things and artificial intelligence technology, both of which would benefit from increased mobile speeds. The ¥20bn sum includes ¥5bn under the management of the two earlier funds.

Mars Innovation and Pfizer form research fund

Canada-based commercialisation firm Mars Innovation has secured an \$800,000 commitment from pharmaceutical firm Pfizer to establish a translational research fund.

The Mars Innovation–Pfizer Translational Research Fund will focus on technologies in life sciences, including

therapeutics, diagnostic and treatment tools, manufacturing and research-enabling products. The fund will seek particularly to identify projects related to rare diseases, cancer, vaccines, inflammation, immunology and cardiovascular disease. It will be managed by Mars Innovation.

Coinbase launches investment unit

US-based digital currency exchange Coinbase has established a corporate venturing fund called Coinbase Ventures to back early-stage startups. The size of the fund has not been disclosed. Coinbase will seek companies in the cryptocurrency space and will initially invest without a requirement to formalise strategic partnerships.

Coinbase noted that it may also invest in competitors to help the ecosystem thrive. A particular focus for the fund will be on startups launched by former employees. Portfolio companies will not, however, receive preferential treatment for securing asset status on Coinbase, but will have to conform to the same framework the exchange uses for all cryptocurrencies.

The fund follows Coinbase general manager Dan Romero telling news publication Business Insider that the company hopes to build a diversified business that touches on all aspects of cryptocurrency.

BBVA Compass to direct more startups

BBVA Compass, a US-based subsidiary of Spain-headquartered financial services firm BBVA, is set to expand its BBVA Momentum accelerator and will invite up to 35 startups to participate.

Formed in 2011, Momentum is a five-month scheme run by BBVA that allows entrepreneurs to use the corporate's resources and expertise to grow while competing for a financial prize. They also receive coaching from staff at Austin's McCombs School of Business.

The initiative was launched last year in the US and attracted of 20 competitors. It is open to participants from Alabama, Arizona, California, Colorado, Florida, New Mexico and Texas – the US states in which Compass operates – and has a top prize of \$50,000.

Barclays banks on corporate venturing

UK-based financial services firm Barclays has established a "venture capital-style" unit to explore new areas in which it can grow revenue, the Financial Times reported.

Barclays has been a relatively active VC investor over the past year, funding companies such as secure communications platform Symphony, distributed ledger technology developer R3 and cognitive computing platform developer Digital Reasoning.

The firm also launched an accelerator in partnership with accelerator operator Techstars in 2015, but it has traditionally been a less frequent participant than European peers such as BBVA or Santander.

The as-yet unnamed unit will be led by Barclays' former head of strategy, Ben Davey, who told Financial Times he wants to use the initiative to access at least one transformational business line that could make a material difference to the bank's bottom line by 2025.

Artificial intelligence, distributed ledger and smart contract technology are among the areas the fund will target, Davey said, adding that the unit would nevertheless have relatively free rein in its investments. It will also consider partnership agreements with startups.



NEWS

Nominet logs on to Cylon accelerator

Internet domain suffix operator Nominet is set to provide financial support for the UK branch of cybersecurity accelerator Cylon as part of a strategic partnership that will run until December 2020. Cylon will receive in-kind support from Nominet as part of the deal. The accelerator's other corporate partners include energy company Innogy, defence systems manufacturer BAE Systems and law firm Pinsent Masons.

Eight startups feature in Cylon's seventh UK cohort, which runs for 13 weeks until mid-June. Cylon will provide each participant with £15,000 (\$21,000) in seed funding.

The cohort includes:

- Alias Robotics, which is building an "artificial immune system" to protect robots from cybersecurity threats.
- AttackFlow, the producer of security static analysis software that shields software developers' source code.
- Keepnet Labs, whose holistic anti-phishing platform relies on artificial intelligence (AI) to catch malicious attachments within emails.
- Risk Ledger, which is developing technology to stop data breaches across the supply chain.
- Sauron, creator of a big data-orientated cyber-surveillance platform for internet-of-things devices.
- Senseon, which is using AI and machine learning to facilitate real-time threat detection and cyberintelligence.
- Sweepatic, developer of software that mimics the perspective of cyber-intruders to give clients a better idea of their vulnerabilities.

Zeisser moves out of Alibaba

Michael Zeisser, chairman of US investments for China-headquartered e-commerce firm Alibaba, has left the company, Recode has reported.

Zeisser had held the position since 2013, during which time the corporate's investments have included messaging platform Snap, augmented reality technology developer Magic Leap and ride-hailing service Lyft. Zeisser's departure was reportedly announced through an internal memo, and was attributed to disagreements over investment strategy with the company's co-founder and chairman, Joe Tsai. Peter Stern, who was part of the US investment team when it was formed in 2013, is expected to replace Zeisser, according to Recode.

Stern, a former banker at financial services firm Credit Suisse who advised Alibaba on its \$7.6bn stock repurchase from Yahoo before joining the company, is expected to assume Zeisser's board observer duties at both Magic Leap and Lyft.

Before coming to Alibaba, Zeisser was a senior vice-president at mass media conglomerate Liberty Media for 10 years, having previously spent 12 years as a partner at consultancy firm McKinsey and Co's media and private equity division.



Michael Zeisser

SoftBank's Misra surrenders Snapdeal board seat

Kabir Misra, managing partner of SoftBank Capital, a corporate venturing subsidiary of telecoms group SoftBank, has left Indian e-commerce marketplace Snapdeal's board of directors, the Business Standard has reported.

SoftBank first invested in Snapdeal as part of a \$500m funding round in 2015, and held a 33% stake and two of the company's board seats from April last year, by which time it had invested \$900m of the \$1.7bn in venture capital it had raised.

The corporate attempted to leverage a merger between Snapdeal and chief rival Flipkart at that time, by withdrawing \$150m to \$200m in debt financing, according to the Economic Times. Misra, who took his seat in March the same year, reportedly played a big part in the talks. However, Snapdeal's founders turned down an offer of up to \$950m from Flipkart in July, and SoftBank subsequently made a significant investment in Flipkart.

Lydia Jett, the other SoftBank representative to have joined Snapdeal's board last year, stepped down in December and was replaced by Saurabh Jalan, an investment professional at SoftBank.

Rothe switches from Capnamic to Iris

Thorben Rothe, principal at corporate-backed venture capital firm Capnamic Ventures, has become head of early-stage investing in Germany-based companies for peer Iris Capital.

Rothe spent five years at Capnamic, whose investor's include Axa, Cewe, Cisco, Defacto, Euroweb,

Gauselmann Die Spielermacher, Hahn Air, Helaba, MGO Digital Ventures, Muellermedien, NWZ Digital, Rheinische Post, Universal Music Group and DuMont Digital, as well as the European Investment Fund and KfW as state-sponsored backers. Before Capnamic, Rothe was an analyst at DuMont Venture.



NEWS

Monsanto's corporate venturing crew comes to DCVC

Kirsten Stead and John Hamer of Monsanto Growth Ventures (MGV), the strategic investment arm of agribusiness Monsanto, are set to co-manage a \$250m fund for venture capital firm Data Collective (DCVC).

US-based DCVC concentrates on seed and series A investments in companies looking to apply technologies such as deep computing, big data and IT infrastructure to large traditional industries.

The fund in question, DCVC Bio, has a \$250m target, according to a securities filing, and is yet to raise capital. Its focus will be on companies that fuse artificial intelligence with biotechnology, according to Axios.

Axios said Hamer, MGV's managing director, and Stead, its investment director had left MGV, though the unit's website still lists both as part of the team. Neither are included as team members on DCVC's site. New additions to the fund include general partners, Zachary Bogue and Matthew Ocko, Data Collective's co-founders and managing partners.

DCVC's past and present portfolio companies include social media company Facebook, ride-hailing platform Uber, digital payment technology provider Square, mobile game producer Zynga and domain name provider VeriSign.



Kirsten Stead



John Hamer

Schnell moves quickly to head private equity

Ralf Schnell, former head of Germany-based industrial conglomerate Siemens' corporate venturing unit for a dozen years, has become head of private equity at Siemens Financial Services.

As CEO of Siemens Venture Capital until the creation of its Next47 corporate venturing unit last March, Schnell had included advisory services to its in-house pension fund. The development of Next47 as a €1bn (\$1.2bn) evergreen investment unit more independent from its business units has allowed Siemens to set up an advisory service for third parties.

Schnell had spent the intervening year as a partner at Next47 under new recruit Lak Ananth, helping to integrate its Siemens Venture Capital portfolio.

Separately, Ananth has been building up his team. Ching-Yu Hu has joined Next47 as a principal based in Palo Alto, California. Hu co-founded Skybox Imaging – now Terra Bella – which designed, built and launched the world's largest constellation of high-resolution imaging satellites and was acquired by Google in 2014 for \$500m. After the sale, she became an entrepreneur-in-residence in Google's internal startup incubator, Area 120.

Next47 had previously hired Matthew Cowan, former co-founder of VC firm Bridgescale Partners, and TJ Rylander, who spent a decade as managing partner at in-Q-Tel, as partners.



Ralf Schnell

Sommer comes to Intel Capital

Intel Capital, the corporate venturing subsidiary of US-listed chip maker Intel, has hired Chiara Sommer as an investment director.

Sommer comes from High-Tech Gründerfonds (HTGF), the German state-mandated venture capital firm that counts dozens of domestic corporates as limited partners, where she was a senior investment director. During her four-year stint at HTGF, Sommer's deals included furniture designer 99chairs, female fitness app developer Asana Rebel, blockchain banking technology developer Bitwala, behavioural targeting service Semasio and art e-commerce platform Junique.

Before joining HTGF at the start of 2014, Sommer was founder and CEO of expertise network service Pickagenius.

She will join fellow investment director Abdul Guefor in Intel Capital's European team, and will be based in Germany. Her hiring follows the departures of Marcos Battisti to C5 Capital, Marcin Hejka to OTB Ventures and Erik Jorgensen to Macquarie Capital over the past two years.

Karen Stafford also joined Intel Capital to cover Northern and Eastern Europe earlier this year.

Eadie takes road to Next47

Jack Eadie has joined Germany-headquartered industrial conglomerate Siemens as a UK-based principal of its Next47 corporate venturing unit. Next47 had already hired Susana Quintana-Plaza as a partner to manage the

UK and other parts of western Europe. Eadie was formerly a venture capital investor at Eight Roads Ventures, the \$4bn VC arm of fund manager Fidelity which operates from offices in the UK, India, China, Japan and the US.



NEWS

Sheffer replaces Prior at GM Ventures

Wade Sheffer has joined corporate venturing unit General Motors Ventures as managing director following the departure of Sherwin Prior to set up venture capital firm Blue Victor Capital.

Before joining GM Ventures, Sheffer was executive director of chassis purchasing at US-based car maker General Motors. He joined GM in 1996 as a test engineer at the Milford Proving Ground. In 1999, he transitioned to the North America outbound logistics quality team and was based in Germany from 2002 to 2005.

Sheffer relocated to Shanghai, China, in 2006 as deputy executive director at Shanghai General Motors in charge of purchasing. In 2009, he returned to the US where he held various leadership positions in global purchasing and supply chain. Sheffer replaces Prior, who joined GM Ventures in September 2010 before leaving this month.

Thayer Ventures hires Grass as venture partner

Katherine Grass has left travel services provider Amadeus, having established its Amadeus Ventures unit, for a venture partner position at travel-focused venture capital firm Thayer Ventures.

Grass originally joined Amadeus in 2006 in a corporate strategy role before heading its new corporate venturing subsidiary, Amadeus Ventures, when it was formed in 2013. She was promoted to global head of innovation at the company the following year.

Amadeus Ventures invested in 10 companies under Grass's leadership, exiting from Olset, a big data technology developer for the travel industry which was acquired by travel services firm Deem in late 2016, and Cabify, a ride-hailing platform valued at \$1.4bn as of January this year.

Formed in 2012 by VC firm Quest Hospitality Ventures and investment holding company Thayer Lodging Group, Thayer Ventures concentrates on investments in the travel, hospitality and transportation sectors.

Included in the GCV Powerlist 2017, Grass will be based in Madrid, Spain, and will assist Thayer in expanding globally. She also founded a corporate innovation services business called Sharp Wire Partners as managing partner earlier this year.



Katherine Grass

Telia makes corporate venturing call...

Heikki Mäkijärvi has joined Sweden-based telecoms and mobile network operator Telia as CEO of its new Telia Ventures corporate venturing unit.

Mäkijärvi had spent nearly a year as a partner at Airbus Ventures, the corporate venturing subsidiary of aerospace manufacturer Airbus, but left in mid-2016 to manage a portfolio of advisory and board positions. In addition to the Telia Ventures role, Mäkijärvi recently joined the board of Finland-headquartered network equipment installer Teleste.

Brendan Ives, managing director of Telia's new business opportunities unit, Telia X, said the decision to form a separate venture unit under Mäkijärvi followed the departure of Nils Granath to Swisscanto Invest (see below).

...while Granath calls up Swisscanto from Telia

Nils Granath, former head of investments at Sweden-based phone group Telia, has become senior investment manager of private equity and venture capital at Swisscanto Invest, an investment unit of Switzerland-based Zürcher Kantonalbank.

Granath was responsible for the growth investment portfolio of Division X at Telia for three years. Brendan

Ives remains managing director of Division X, while Rebecka Vredin and Johan af Sandeberg are venture investment managers.

Earlier Granath spent nearly three years as a partner at investment bank Cartagena Capital, now part of Bryan Garnier, and as an investment officer at Swisscom Ventures.

Von Richter banks on LBBW Ventures role

Andreas von Richter has joined LBBW Ventures, part of Germany-based bank Landesbank Baden-Württemberg, as a partner in his fifth venture role over the past decade.

Von Richter was previously a partner at Aster Capital, a multi-corporate fund financed by Schneider, Solvay and Alstom among others, and managing partner of EcoMobility Ventures, a €40m (\$48m) multi-corporate fund backed by SNCF, Total, Orange, Air Liquide and Michelin and managed by Idinvest. He has also been an investment manager at Saudi Aramco Energy Ventures, and vice-president of GE Capital. At LBBW Ventures, he joins Harald Poth and Christoph Sage-mann under managing director Oliver Konanz.



NEWS

Lee emerges at Unblock after IDG Ventures Korea

Matthew Lee, former CEO and managing partner at publisher IDG's corporate venturing unit in Korea, has become CEO and "token economy architect" at Unblock – a blockchain technology subsidiary recently launched by Line Plus, a Korean subsidiary of Japan-based mes-

saging app provider Line. Lee left IDG Ventures Korea in early 2016 and spent the past two years or so as managing partner of Cognitive Investment before moving to Unblock and another decentralised ledger technology provider, AD4th.

Aaltonen joins Yara for agtech fund

Erkki Aaltonen has been hired as director of venture investments for Norway-based chemical and agricultural products supplier Yara International.

Aaltonen said: "I will set up and run a new fund – YaraGerminate. We will also set up incubation and acceleration programs in various locations globally, the first in Sao Paolo, Brazil."

Aaltonen had spent two years as executive director of StartAD, New York University Abu Dhabi's seed investment fund and "one-stop shop for launching new ventures" in the Middle East and North Africa. He will be replaced as leader by Robyn Brazzil.

The StartAD position followed a year as a growth investor at the Kaust Innovation Fund, the Saudi Arabia-based King Abdullah University of Science and Technology's venture fund. He has had various investment and corporate development roles in venture capital and telecoms businesses, including VTT Ventures and Nokia Ventures.



Erkki Aaltonen

Joaug joins Aster as principal

VC firm Aster Capital has hired Jérôme Joaug as a principal in its investment team to focus on the mobility, energy and industry sectors.

Joaug, a serial entrepreneur who co-founded graphene producer Cambridge Nanosystems, a spinout from University of Cambridge, and internet-of-things platform Nymbly. He is a graduate of both Cambridge and École Polytechnique, and is an angel investor.

Jean-Marc Bally, managing partner at Aster, said: "I am thrilled to welcome a serial entrepreneur to the team. Jérôme will enhance our expertise in the areas of artificial intelligence, blockchain, the internet of things and deep tech and will drive Aster's development in the UK. In hiring him, we are also sending a clear signal to startups – who better to understand their needs than an entrepreneur?"

Aster Capital emerged out of Schneider Electric Ventures, the corporate venturing arm of industrial group Schneider Electric, becoming independent in 2010 and attracting equipment provider Alstom and chemicals company Solvay as limited partners. The firm most recently closed a \$282m fund in November 2017, with plastics manufacturer Plastic Omnium joining as an investor. The firm has almost \$590m under management.



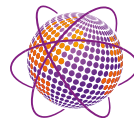
Jérôme Joaug



NCET2 and Global Corporate Venturing announce strategic innovation partnership



Global Corporate Venturing



Global University Venturing

Global Corporate Venturing and the National Council of Entrepreneurial Tech Transfer (NCET2) have formed a strategic partnership bringing together two leading innovation-focused organisations for the purposes of:

Co-organising a series of university startups and venturing best practices conferences.

Providing an exciting new venue for NCET2 to showcase university startups created under its Startup Development Program to Fortune 500 companies at GCV events in the US.

In order to focus on its Startup Development Program, NCET2 will transfer to GCV its signature university startups best practices conference, which it has organised for the past 14 years. NCET2 will continue to organise and expand its University Startups Demo Days to showcase university startups created by universities to investors and corporate open innovation groups, including at GCV corporate venturing events in the US.

"I've watched Global Corporate Venturing grow and prosper since I first spoke at their inaugural conference in London in 2011. They are a truly entrepreneurial and professional team, and I can't imagine a better partner to continue the university startups best practices conferences. I fully expect that they will provide similar success in bringing the university venturing community to a new professional level as they did for the corporate venturing community."

Tony Stanco, NCET2 executive director

"Tony and his team at NCET2 have been inspirational role models for our trade papers in their focus on the community and entrepreneurship and delivering high-quality spaces for the exchange of ideas and deals. We are, therefore, honoured and delighted to deepen our partnership through hosting NCET2's Startup Development Program and Demo Days at our US events."

James Mawson, founder and editor-in-chief of Global Corporate Venturing and Global University Venturing



**National Council of
Entrepreneurial
Tech Transfer**

SECTOR FOCUS

Continuing metamorphosis of the media sector

Kaloyan Andonov, reporter, GCV Analytics



The media industry has been deeply affected and transformed by digitisation. Over the past few decades, consumers have shifted their preferences from printed newspapers, books, CDs and DVDs to digital subscriptions, e-books and online on-demand audio and video streaming.

However, demand-side pressure is not the only contributor to the shift. On the supply side, the ubiquity of internet access, combined with cheaper and more sophisticated consumer electronics, social media platforms and software, have all lowered the barriers to entry in content creation. Consumers are no longer just avid users, but also content creators and providers.

This is captured by GCV Analytics data, as the major subsectors within emerging media businesses are digital marketing and adtech, audio and video content – mostly streaming – gaming and eSports, as well as social media and networks, as outlined below.

Experts and media executives attending this year's World Economic Forum in Davos identified major trends that have brought about the transformation of the media space and continue to drive its change. On the whole, those trends are demographic, behavioural and technology-related.

There are several demographic drivers of change in the media industry. The rise of "millennials" – the generation born between 1981 and 1997 – constitute a consumer segment demanding convenience, instant access and memorable user experience. Their patterns of consumer behaviour are likely to be picked up by the rising number of middle-class consumers worldwide – expected to reach 4.9 billion people by 2030 – who will also demand convenient and instant-access media services. Meanwhile, the world's population is ageing. This foreshadows increased demand for a variety of health and wellness, entertainment and education services for the elderly.

Consumer behaviour shifts have been also instrumental. Not only do new consumers demand instant access and gratification through unforgettable media experiences but they are also becoming increasingly savvy at identifying marketing and propaganda disguised as editorial content. As they turn to ad-blocking software, brand managers and marketers find themselves needing to innovate in the realm of customer engagement. Moreover, we have also witnessed the rise of amateur content creators through platforms like YouTube and other social media.

Amid the current scandal over use of data at social media portal Facebook, it is also noteworthy that media consumers are aware their media consumption generates data that are collected, analysed and monetised by third parties. It is somewhat difficult to say now whether privacy concerns will bring about significant changes in the way data are handled. The new generation of media consumers appears fairly comfortable with giving up the rights to its online footprint in exchange for free services.

Technology-related factors include the availability and penetration of high-speed mobile internet access, enabling people to consume media content anytime and anywhere. The cornucopia of big data that consumers generate enables marketers and media companies to gain greater consumer insights. Media data analytics and real-time content management are the corollaries. Increasingly important in this context is the role of social media, constituting a significant channel for promoting or destroying brand image.

There have been major shifts in the related business of advertising, also increasingly digitised. Combined global digital advertising spending is expected to reach \$335.5bn by 2020, according to data from Statista, cited by TechCrunch. While there is no lack of startups in the adtech and marketing tech fields, this new subsector is already concentrated. According to the Mary Meeker's 2017 Internet Trends Report, two companies – search engine Google and social media platform Facebook – accounted for about two-thirds of US internet advertising revenues in 2016. However, this has not dissipated corporate venturers' interest in adtech – there are still plenty of opportunities in the space for entrepreneurs.

In the gaming space, video games and traditional consoles continue to be popular, as the 2017 US Department of Commerce report on the media and entertainment industry found, but virtual reality (VR) and augmented reality (AR) have been growing fast through all subsectors of the world of entertainment. As discussed below, many media corporate venturers often co-invest in VR and AR businesses. Even though this is still a budding subsector of the media industry, it is one with a promising future where significant bets are placed.

GCV Analytics defines the media sector as encompassing print and online publishing, audio and video content, social media and networks, games and gaming, sport and gambling, virtual reality (VR) and augmented reality (AR) entertainment content and other media businesses.



SECTOR FOCUS

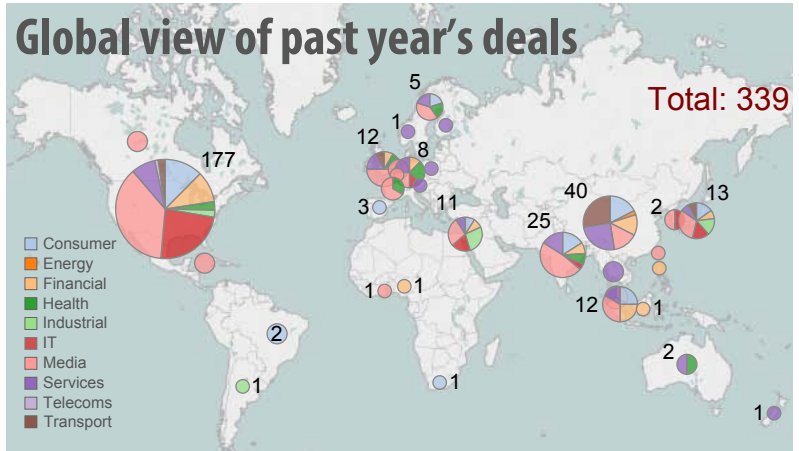
In the gaming space more broadly, one underlying trend is the growth of mobile gaming. According to a report by App Annie and International Data Corporation, mobile gaming raised its share of the worldwide gaming market, as spending on mobile games was over a third higher than spending on consoles, handhelds and desktop computer games put together. The report also points out that markets like China, Japan and South Korea are largely driving this growth. The Asia-Pacific region accounted for 60% of all consumer spending on mobile games last year. The report also noted that, even though mobile games constituted 35% of downloads on the iOS App Store and Google Play, they represented almost 80% of all app spending. Some of the top corporate-backed deals that we saw over the past year were in the gaming segment.

It is also impossible to ignore the eSports phenomenon, which has become an inseparable part of the industry. Revenues from eSports and related streaming content are forecast to reach \$3.5bn by 2021, according to a report by Juniper Research. These projections take into account the growing popularity of eSports and gamer personalities on specialised platforms such as Twitch. Its monetisation comes primarily from online advertising in streaming. It must be noted, however, that eSports started as a non-western phenomenon, pioneered in South Korea with most viewers in China. The International eSports Federation wants eSports tournaments recognised as a Olympic events by 2024.

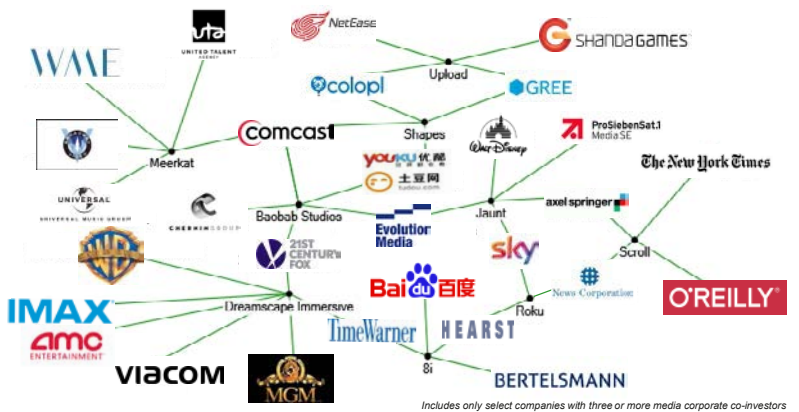
For the period between April 2017 and March 2018, GCV reported 339 venturing rounds involving corporate investors from the media sector. A large part of those (177) took place in the US, 40 were hosted in China and 25 in India.

The majority of these commitments (118) went to emerging enterprises from the same sector, with the remainder going into companies from a range of closely related sectors – 49 deals in IT, mostly in big data analysis tools, business intelligence software and VR and AR technologies, 46 in services, primarily in edtech and logistics, 45 in consumer, encompassing e-commerce platforms, consumer electronics as well as food and beverages, and 36 in financial, mostly payment technology and alternative lending.

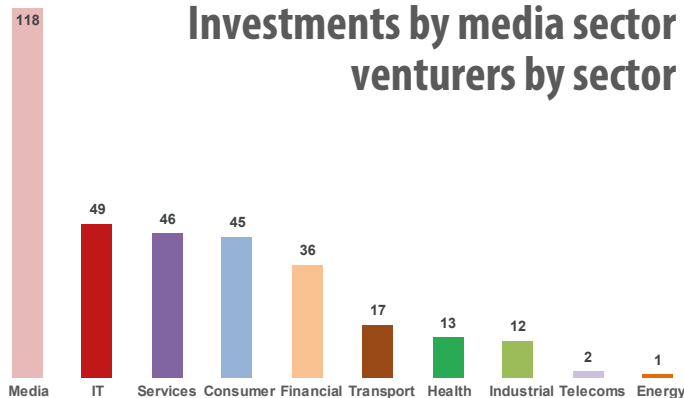
The network diagram showing the co-investments of media corporates, illustrates the sector's incumbents have often co-invested in VR and AR technologies – content and service providers like Upload, Shapes and Boobab Studios, 8i and Jaunt – as well as related technologies, such as



Co-investments of media sector venturers 2014-2018 YTD



Investments by media sector venturers by sector



SECTOR FOCUS

computer vision and image analysis developer Meerkat.

On a calendar year-on-year basis total capital raised in corporate-backed investment rounds went down from \$19.66bn in 2016 to \$14.28bn in 2017 – a 28% drop. The deal count decreased by 13% from 391 deals in 2016 to 342 in 2017.

As outlined later in this article, the 10 largest investments by corporate venturers from the media sector were mostly within media, transport and consumer sector.

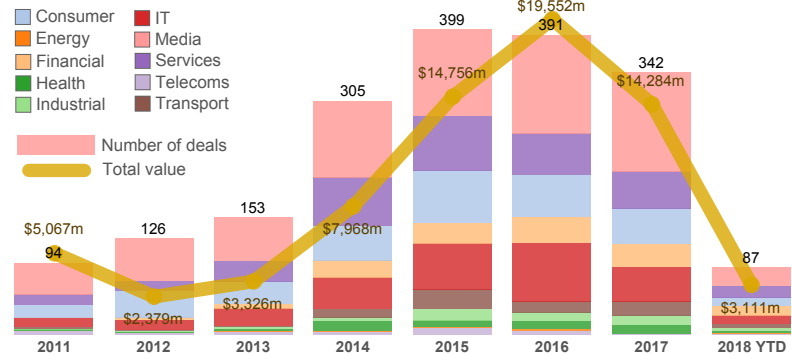
The leading corporate investors from the media sector were mass media group Comcast, publishing group Bertelsmann and internet media company Baidu. Film and entertainment company Walt Disney topped the list of media corporates committing capital in the largest rounds, along with Comcast, Baidu and Bertelsmann. The most active corporate venturers in the emerging media companies were internet conglomerate Alphabet, internet company Tencent as well as internet and telecoms conglomerate Soft-Bank along with Walt Disney and research company International Data Group (IDG).

The presence of Alphabet and Tencent in this list is noteworthy but unsurprising, as such Internet companies are involved in various subsets of the media sector

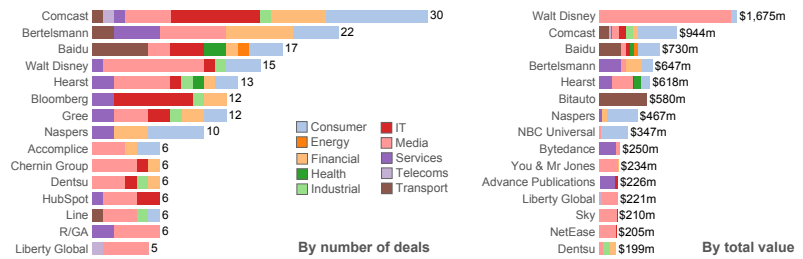
– from online and print publishing to VR & AR to film and entertainment. Furthermore, Google is one of the largest global digital advertisers, as noted above.

The rising media businesses in the portfolio of these non-traditional investors were varied, encompassing anything from

Media sector deals 2011-18



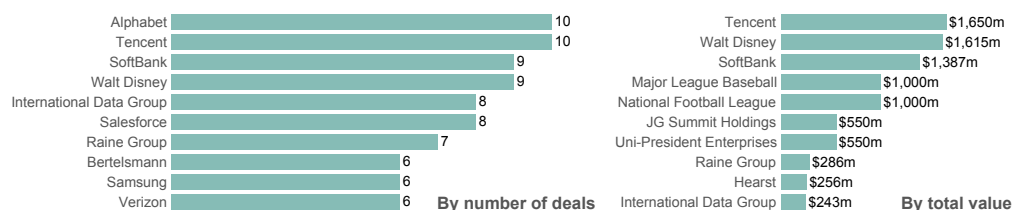
Top media sector investors



Corporate co-investments in media enterprises 2014-2018 YTD

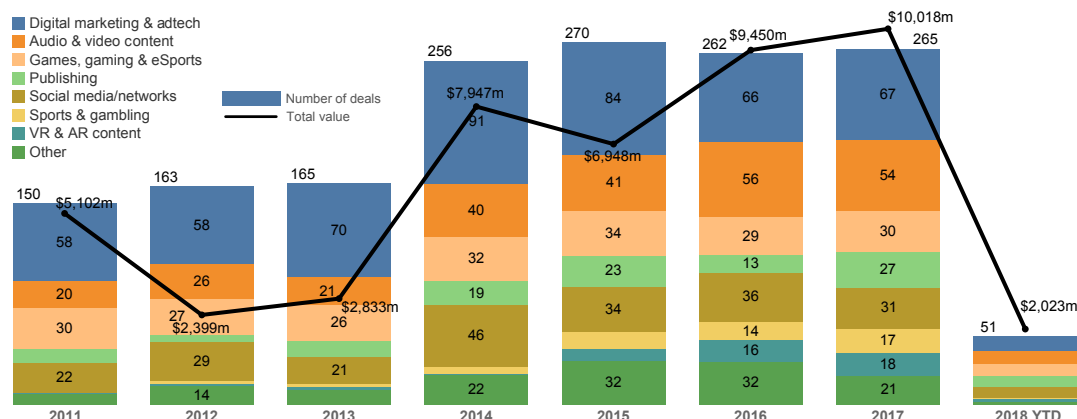


Top investors in media enterprises



SECTOR FOCUS

Media sector deals by subsector 2011-18



publishing and social media through audio and video streaming to games and adtech. Such companies have broad interests in the sector and anything that can disrupt it. The network diagram, representing corporate co-investments in media enterprises illustrates that.

Overall, corporate investment in emerging media-focused enterprises remained stable from 2016 to 2017 in terms of volume and increased only slightly in estimated value. According to GCV Analytics data, \$10.02bn was invested over 265 rounds in 2017, compared with the \$9.45bn invested over 262 deals in 2016.

Deals

Media sector corporates invested in a number of large rounds, raised by a range of enterprises, primarily transport, media and consumer-oriented businesses. Only one of the top rounds stood above the \$1bn mark.

Walt Disney invested a further \$1.58bn in its portfolio company BamTech, which is a US-based online video streaming technology provider. Disney had paid \$1bn for a 33% stake in BamTech in August 2016 as part of a deal that granted it an option to acquire a majority stake. This investment hiked its share to 75%. BamTech was originally created by MLB Advanced Media, the interactive media arm of sporting league Major League Baseball (MLB). It powers the online video offerings of MLB and several other major sporting organisations that together have attracted about 7.5 million paid subscribers.

Tencent led an \$818m series C round for China-based automotive e-commerce platform Chehaoduo. Shougang Fund, an investment branch of steelmaker Shougang, and ICBC International, a subsidiary of Industrial and Commercial Bank of China, also took part in the round. Chehaoduo was formerly known as Guazi, which is still the brand under which its used car trading platform operates, but the company has since expanded into new car sales through a brand called

Top 10 deals by media sector corporate investors over the past year					
Company	Location	Sector	Round	Size	Investors
BamTech	US	Media	Stake purchase	\$1.58bn	Walt Disney
Chehaoduo	China	Transport	C	\$818m	Capital Today DST System FountainVest Partners GIC H Capital Industrial and Commercial Bank of China International Data Group Sequoia Capital Shanhang Capital Investment Shougang Group Sichuan Taihe Group Tencent Yunfeng Capital
Peloton Cycle	US	Consumer	E and beyond	\$325m	Balyasny Asset Management Comcast Fidelity GGV Capital Kleiner Perkins Caufield & Byers NBC Universal Questmark Partners True Ventures Wellington Management
17Zuoye	China	Services	-	\$200m	Bytedance undisclosed investors
Niantic Labs	US	Media	B	\$200m	Founders Fund Javelin Venture Partners NetEase Spark Capital You & Mr Jones
Everfi	US	Services	D	\$190m	Advance Publications Allen & Company Eric Schmidt Evan Williams Jeff Bezos Main Street Advisors Rise Fund TPG private investors
Coocaa	China	Consumer	-	\$160m	Baidu
Macro	US	Media	-	\$150m	Emerson Collective Ford Foundation Kellogg Libra Foundation Medialink MNM Creative angel investors
WM Motor	China	Transport	B	\$150m	Baidu Tencent
iFlix	Malaysia	Media	-	\$133m	Catcha Group EDBI Evolution Media Capital Hearst Jungle Ventures Liberty Global Philippine Long Distance Telephone Sky undisclosed strategic investors



SECTOR FOCUS

Maodou as well as online vehicle auctions and adjacent services like insurance and appraisal.

US-based fitness company Peloton completed a \$325m series E round that featured Comcast NBCUniversal. Wellington Management, Fidelity Investments, Kleiner Perkins Caulfield & Byers and True Ventures co-led the round. Founded in 2012, Peloton operates a home fitness offering that combines its custom-made exercise bike with an app-based subscription service that provides video access to live classes and performance-tracking metrics.

Bytedance, the owner of news aggregation app Toutiao, led a \$200m round for China-based online education provider 17zuoye. The round increased the company's overall funding to more than \$335m and followed a \$100m series D round led by venture capital firm H Capital in 2015 that reportedly valued it at \$600m. 17zuoye provides online learning and assessment materials covering English and mathematics for children between five and 18 which can be viewed by parents and teachers.

US-based AR mobile game developer Niantic raised \$200m in a series B round that included brand services provider You & Mr Jones and internet company NetEase. The round was led by venture firm Spark Capital. Niantic was established in 2010 as an internal startup at Google before being spun out in 2015. The company has developed a range of massively-multiplayer online role-playing games, such as Pokemon Go, that incorporate real-world landmarks.

Media group Advance Publications was among the investors in a \$190m series D round for US-based digital education provider EverFi, led by impact investor Rise Fund, which provided \$120m. TPG Growth, the subsidiary of private equity group TPG, also contributed. Founded in 2008, EverFi has built a subscription-based digital learning platform that serves a network of more than 4,200 partners across North America.

A subsidiary of Baidu invested RMB1.01bn (\$160m) in China-based smart television producer Coocaa. The Baidu subsidiary will also buy shares in Coocaa from one of its existing investors, Kujin Shenzhen, while Baidu itself will hold an 11% share in Coocaa once both transactions have closed. Coocaa was spun off from consumer electronics manufacturer Skyworth Digital, which will still own 64.3% of the company. The company develops and produces internet-connected TVs but has agreed to divest its hardware business to Skyworth by this month in return for all rights to its intellectual property. It will also form a long-term services agreement with Skyworth.

US-based multi-platform media production company Macro raised \$150m in combined equity and debt financing from investors including entertainment company MNM Creative and business development firm Medialink. The round also featured impact investment firms Ford Foundation, WK Kellogg Foundation and Libra Foundation. Founded in 2015, Macro produces and finances digital series, television shows and films that target a multicultural market and seek to offer a more accurate portrayal of people of colour.

Malaysia-based online streaming subscription service iFlix closed a \$133m funding round led by diversified media conglomerate Hearst. The round included media groups Liberty Global and Sky, internet company Catcha Group, telecoms firm Philippine Long Distance Telephone Company and Evolution Media Capital, a boutique investment bank co-founded by talent firm Creative Artists Agency. Founded in 2015, iFlix has created a subscription-based video-streaming platform aimed at emerging markets. The service is available to 19 countries in Asia, the Middle East and Africa.

There were other interesting deals in emerging media-focused business that received financial backing from corporate investors from other sectors.

SoftBank, through its SoftBank Vision Fund, led a \$1bn funding round in US-based sports e-commerce platform Fanatics. The round included sports bodies National Football League and Major League Baseball, and Singapore-based government-backed firm Temasek. Fanatics' valuation was reportedly \$4.5bn. The company has created an e-commerce platform that sells official sports team merchandise and apparel. In April last year, the company acquired a manufacturing business to produce team jerseys and other products.

Tencent provided \$630m of funding for China-based game-focused livestreaming platform Douyu. Originally known as

Top 10 investments in emerging media sector enterprises over the past year

Company	Location	Round	Size	Investors
BamTech	US	Stake purchase	\$1.58bn	Walt Disney
Fanatics.com	US	-	\$1bn	Major League Baseball National Football League SoftBank
Douyu TV	China	-	\$630m	Tencent
Sea Ltd	Indonesia	-	\$550m	Cathay Financial Group Farallon Capital Management GDP Venture Hillhouse Capital Management JG Summit Holdings Uni-President Enterprises Corporation
Huya	China	B	\$462m	Tencent
Slack	US	E and beyond	\$250m	Accel Partners SoftBank
Niantic Labs	US	B	\$200m	Founders Fund Javelin Venture Partners NetEase Spark Capital You & Mr Jones
SoundCloud	Sweden	E and beyond	\$170m	Raine Group Temasek
Pinterest	US	-	\$150m	Andreessen Horowitz Bessemer Fidelity Firstmark Capital Goldman Sachs SV Angel Valiant Capital Wellington Management
Macro	US	-	\$150m	Emerson Collective Ford Foundation Kellogg Libra Foundation Medialink MNM Creative angel investors



SECTOR FOCUS

AcFun, Douyu operates an online livestreaming platform that broadcasts gaming and eSports content. It had 30 million daily active users by late 2017, when it claimed it had also reached profitability. Tencent has been an investor since the company's \$100m series B round in early 2016.

Indonesia-based internet company Garena, rebranded to Sea Ltd, disclosed \$550m in new funding from investors including diversified conglomerate JG Summit Holdings and food supplier Uni-President Enterprises. Founded in 2009, Sea operates a diversified internet business that includes an e-commerce platform called Shopee, online video streaming, chat, mobile gaming and a financial services platform known as AirPay.

Tencent committed approximately \$462m in series B funding for Huya, a China-based live game-streaming spinout from social media platform YY. The deal was announced within hours of news that Tencent had invested in Huya's main rival, Douyu (see above). The size of the stake Tencent acquired in Huya was not revealed, but the company confirmed that YY remained its majority investor. Huya's online livestreaming platform enables users to stream their gaming to viewers. It had more than 66 million monthly active users, including 5.7 million paying subscribers.

Enterprise communication platform Slack raised \$250m in a round co-led by SoftBank and venture capital firm Accel. The round valued Slack at more than \$5bn, according to sources. Earlier reports had suggested the size of the round could reach \$500m. Slack has built a workplace communication app with more than 5 million daily active users, including 1.5 million using the paid version.

Merchant bank Raine Group and Temasek agreed to invest a "significant" amount in Germany-based corporate-backed online music-streaming platform SoundCloud. SoundCloud, whose investors include social media company Twitter, did not disclose details of the deal, but Raine and Temasek reportedly invested about \$170m, which would give them a 53% stake in the company. Founded in Sweden in 2007, SoundCloud operates an online platform where music can be uploaded, shared and streamed.

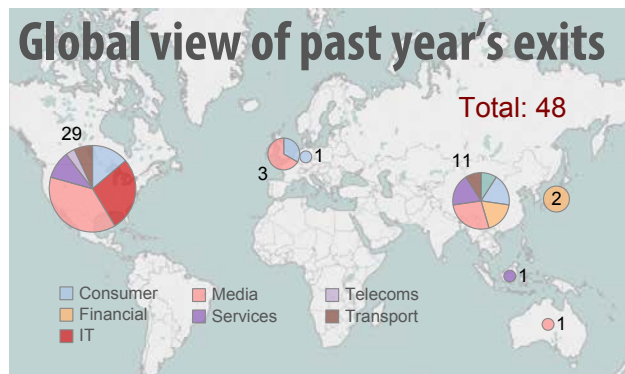
Pinterest, a US-based social media platform backed by e-commerce firm Rakuten, raised \$150m from existing investors at a \$12.3bn valuation. Pinterest operates a social network with 175 million monthly active users that essentially acts as an online scrapbook. It has recently focused on increasing monetisation of its platform through links to e-commerce and through promoted "pins" that connect users to specific products.

Exits

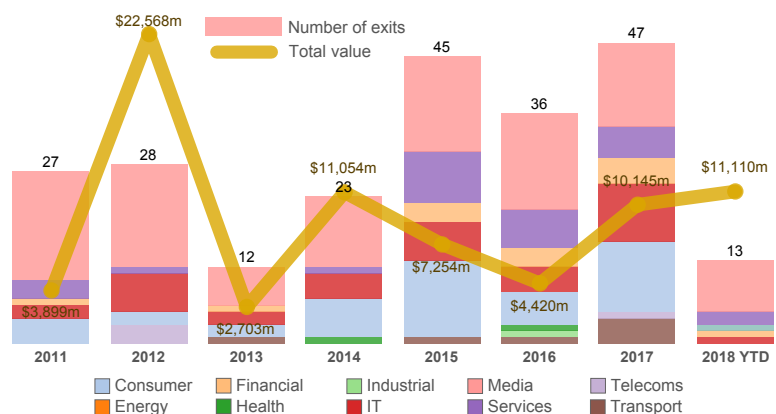
Corporate venturers from the media sector completed 48 exits between April last year and March this year, including 30 acquisitions, ten initial public offerings (IPOs), three mergers and one stake sale. On a calendar year-on-year basis, there was a sharp increase to 47 exits in 2017, up from the 36 transactions tracked in 2016. The estimated exited capital also surged substantially to \$10.15bn in 2017, up from \$4.42bn in 2016 – more than a twofold increase.

Media and e-commerce firm Naspers sold a HK\$76.95 (\$9.8bn) stake in Tencent, in which it had invested \$32m in 2011. Tencent operates a large-scale online services offering centred on its messaging app, WeChat, which boasts over a billion users. Naspers had purchased a 46.5% share of Tencent through its \$32m investment three years before its IPO in Hong Kong, and now holds 33.2%.

Germany-based online food ordering platform Delivery Hero went public in a €996m (\$1.13bn) IPO, which gave a partial exit to e-commerce holding company Rocket Internet. The IPO consisted of 18.95 million new shares, 15 million shares held by existing investors, including Naspers,



Media sector exits 2011-18



SECTOR FOCUS

Top 10 exits by media sector corporate investors over the past year

Company	Location	Sector	Exit type	Acquirer	Size	Investors
Tencent	China	IT	Stake sale		\$9.8bn	Naspers
Delivery Hero	Germany	Consumer	IPO	Rocket Internet	\$1.13bn	Global Online Takeaway Group Naspers Rocket Internet
Qudian	China	Consumer	IPO		\$900m	Ant Financial BlueRun Ventures Hangzhou Liaison Interactive Information Technology Kunlun Phoenix Fortune Source Code Capital
Yixin Group	China	Transport	IPO		\$867m	Baidu Bitauto China Orient AMC International JD.com private investors Tencent
Baidu Waimai	China	Consumer	Acquisition	Rajax	\$800m	Ajisen Investment Baidu Hina Group
Tantan	China	Media	Acquisition	Momo	\$760m	Bertelsmann DCM DST System Genesis Capital GX Capital LB Investment SAIF Vision Plus YY
Bilibili	China	Media	IPO		\$483m	China Media Capital FingerFun H Capital Haitong International Huaxing Capital Partners International Data Group Legend Holdings Qiming Venture Capital Qiming Venture Partners Tencent Tiger Global Management Venture International Windforce Ventures
Shazam	UK	Media	Acquisition	Apple	\$400m	Acacia Capital Partners Access Industries America Movil Buran Venture Capital DN Capital Institutional Venture Partners International Data Group Kleiner Perkins Caufield & Byers Sony Universal Music Group
Gigya	US	IT	Acquisition	SAP	\$350m	Adobe Advance Publications Benchmark Common Fund Capital DAG Ventures Greenspring Associates Intel Mayfield Fund Vintage Investment Partners
Roku	US	Consumer	IPO		\$253m	21st Century Fox Anthony Wood Fidelity Globespan Capital Partners Hearst Luminari Capital Menlo Ventures Netflix News Corp Sky Viacom

and 5.09 million shares held by the Rocket Internet-founded Global Online Takeaway Group, all at €25.50 each, at the top of the €22 to €25.50 range. Delivery Hero has built an online food ordering and delivery platform that serves customers in more than 40 countries across Europe, Latin America and the Middle East, North Africa and Asia-Pacific.

Qudian, a China-based online consumer lending service backed by game producer Kunlun Tech and financial services provider Ant Financial, raised \$900m from its US flotation. The company priced 37.5 million American depository shares at \$24 each on the New York Stock Exchange, above the \$19 to \$22 range it had set, giving it a market value of about \$7.9bn. Founded in 2014 and formerly known as Qufenqi, Qudian runs an online platform that provides credit to mostly young customers who are underserved by traditional banks due to their lack of credit history.

Yixin Group, a China-based e-commerce marketplace operator spun out of automotive transaction services provider BitAuto, raised HK\$6.77bn in an IPO. The company issued almost 879 million shares on the Hong Kong Stock Exchange priced at the top of the IPO's HK\$6.60 to HK\$7.70 range. The firm counted Baidu, Tencent and e-commerce firm JD.com among its previous backers. Yixin runs an online platform that functions as a marketplace for vehicles, and also operates a financial services operation that provides leasing as well as financing for car purchases.

Waimai, a food delivery service launched by Baidu, was acquired by Rajax, an operator of food delivery company Ele.me. Baidu will own a small stake in the business. The transaction reportedly valued Waimai at about \$800m, though the company was estimated to be worth as much as \$2.5bn the previous year. Waimai is expected to continue operating as an independent entity and staff are set to remain with the company.

Social media company Momo agreed to acquire China-based social engagement platform Tantan for about \$760m, allowing Bertelsmann and YY to exit. The transaction consisted of \$601m in cash and 5.3 million new shares in YY equating to \$162m based on its closing price on Nasdaq. The deal would give Tantan's shareholders a 2.7% stake in Momo. Tantan runs a social meeting app that operates through a swipe-left-or-right mechanism that can be used to make platonic or romantic connections.

Bilibili, a China-based online entertainment platform backed by mobile game developer FingerFun and Tencent, raised \$483m when it floated in the US. The company priced 42 million American depository shares at \$11.50 each, in the middle of its \$10.50 to \$12.50 range, equating to a \$3.19bn market cap. Bilibili operates an online platform focused on anime, comics and gaming that incorporates video streaming, mobile games and livestreaming. It had an average of 76 million monthly active users in the first two months of this year.

Electronics producer Apple acquired Shazam, a UK-based music identification app developer backed by a host of corporate investors, including IDG as well as record companies Sony Music Entertainment and Universal Music Group and conglomerate Access Industries, among others. Although neither company disclosed how much Apple paid, the price was reported to be about \$400m. Shazam has developed an app capable of identifying background music through a mobile device's microphone, though the company has expanded into commercial partnerships that tie in with television media campaigns.



SECTOR FOCUS

Top 10 exits from media enterprises over the past year

Company	Location	Exit type	Acquirer	Size	Investors
Musical.ly	China	Acquisition	Bytedance	\$800m	Cheetah Mobile DCM GGV Capital Greylock Partners Qiming Venture Partners
Tantan	China	Acquisition	Momo	\$760m	Bertelsmann DCM DST System Genesis Capital GX Capital LB Investment SAIF Vision Plus YY
Razer	US	IPO		\$550m	Accel Partners GIC Hangzhou Liaison Interactive Information Technology Intel Sirius Venture Partners
Bilibili	China	IPO		\$483m	China Media Capital FingerFun H Capital Haitong International Huaxing Capital Partners International Data Group Legend Holdings Qiming Venture Capital Qiming Venture Partners Tencent Tiger Global Management Venture International Windforce Ventures
Shazam	UK	Acquisition	Apple	\$400m	Acacia Capital Partners Access Industries America Movil Buran Venture Capital DN Capital Institutional Venture Partners International Data Group Kleiner Perkins Caufield & Byers Sony Universal Music Group
Faceu	China	Acquisition	Toutiao	\$300m	International Data Group Lightspeed China Partners Meitu
Metamarkets	US	Acquisition	Snap	\$100m	AOL Founder Collective IA Ventures Khosla Ventures True Ventures Village Ventures Wellington Financial undisclosed strategic investors
Saavn	India	Merger		\$100m	Reliance Industries
Lytro	US	Acquisition	Alphabet	\$40m	Allen & Company Andreessen Horowitz Blue Pool Capital Danhua Capital EDBI GSV Capital Hon Hai Huayi Brothers Media Group New Enterprise Associates North Bridge Venture Partners Qualcomm private investors
Crisp Media	US	Acquisition	InterGlobe Technology Quotient	\$33m	EDBI Intel Meritage Funds

Enterprise software provider SAP agreed to acquire US-based customer management platform Gigya in a deal that will enable media group Advance Publications, chipmaker Intel and software provider Adobe to exit. SAP will pay \$350m for the company, which had disclosed approximately \$104m in funding. Founded in 2006, Gigya has developed a customer identity management platform that helps businesses register customers, manage their details and maintain relationships with them, with the option to provide them with specialised services at the same time.

US-based television streaming service Roku closed an IPO that granted exits to several media companies at \$253m after the underwriters took up the full over-allotment option. The company initially raised \$219m in the IPO, issuing approximately 6.7 million shares priced at the top of its \$12 to \$14 range. Exiting corporate investors included media company Sky's corporate venturing unit Sky Ventures, media groups 21st Century Fox, News Corp and Viacom, as well as, reportedly, online streaming service Netflix. Roku sells set-top boxes that allow subscribers to stream television content from a range of TV and online sources. It had more than 15 million active subscribers as of June 2017.

Global Corporate Venturing also reported exits of emerging media-related enterprises that involved corporate investors from other sectors.

Bytedance, owner of news app Toutiao, acquired China-based social video app developer Musical.ly, giving an exit to mobile app developer Cheetah Mobile. According to sources, Bytedance agreed to pay between \$800m and \$1bn. Musical.ly has created a short-form music-based social video app aimed at a millennial user base. Users upload a 15-second clip of themselves lip-synching or engaging in some other activity accompanied by a popular song.

Razer, a US-based gaming equipment provider whose investors include Intel, raised HK\$4.12bn when it floated in Hong Kong. The company priced about 1.07 billion shares at HK\$3.88 each, near the top of its HK\$2.93 to HK\$4 range. Razer produces a range of gaming accessories, such as specialist keyboards, headsets and laptops, as well as configuration and launcher software, and also maintains a digital currency and a range of eSports teams.

Mobile news platform Toutiao reportedly acquired China-based photo augmentation app developer Faceu for \$300m, giving an exit to image modification platform Meitu. Faceu has created an app that uses AR to add filters such as text, emojis or overlaid facial modifications to users' selfies in real time, rather than requiring them to be edited later. The technology can also be used for video clips and chats. Faceu had 250 million registered users by last October – the majority are girls under 18.

Metamarkets, a US-based advertising technology developer backed by internet group Oath, was acquired by messaging app developer Snap for less than \$100m. Neither Metamarkets nor Snap confirmed the deal at the time it was reported. Founded in 2010, Metamarkets provides interactive advertising analytics tools for businesses to track the real-time ad-hoc performance of their marketing campaigns. Its clients include Oath, social media company Twitter and cross-device advertising platform Drawbridge.

Saavn, an India-based music-streaming service backed by Bertelsmann and Liberty Media, agreed to a merger with Jio-Music, a digital music subsidiary of conglomerate Reliance Industries. Reliance will invest up to \$100m in Saavn as part of



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the agreement, providing \$20m upfront to support international growth and expansion efforts for the merged platform, which is valued at more than \$1bn in the deal, with Saavn valued at about \$330m. The corporate will also buy a total of \$104m worth of stock from existing shareholders, including Liberty and Bertelsmann. Founded in 2007, Saavn's service focuses on Bollywood, and regional Indian and English language music. The platform has 30 million songs, according to its website.

Alphabet agreed to acquire US-based imaging technology developer Lytro via its company Google, in a deal that will enable mobile chipmaker Qualcomm, entertainment group Huayi Brothers and contract manufacturer Foxconn to exit. Google will pay between \$25m and \$40m for Lytro, which had raised more than \$200m in total, according to various sources, one of which described the prospective transaction as an "asset sale". Founded in 2006, Lytro has developed a light-field camera and imaging platform that can create the perception of 3D from 2D photographs, for purposes such as virtual reality.

Crisp Media, a US-based advertising technology developer backed by Intel, agreed to an acquisition by media and analytics company Quotient for an initial \$33m. Quotient will pay \$20m in cash, with the remainder provided in stock. Crisp Media could secure up to an additional \$24.5m subject to financial milestones. Founded in 2003, Crisp Media operates under the brand name Crisp Mobile, offering mobile marketing and advertising services. The technology enables retailers to drive in-store sales by sending personalised messages to shoppers at optimal times.

Funds

Between April 2017 and March 2018, corporate venturers and corporate-backed VC firms investing in the media sector secured over \$1.94bn in capital via 28 funding initiatives, which included 17 corporate-backed VC funds, eight new venturing units, two accelerators and one other initiative.

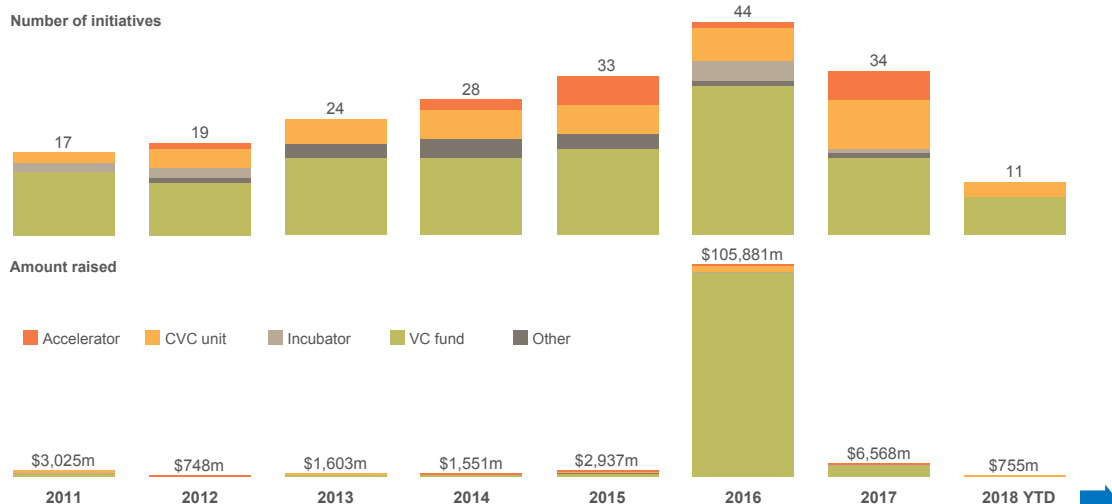
On a calendar year-to-year basis, funding initiatives decreased notably in number— from 44 in 2016 to 34 last year. Total capital also went down from the estimated \$105.88bn – which including the record-breaking near-\$100bn SoftBank Vision Fund – to \$6.57bn during the same period.

Israel-based social game developer Playtika launched corporate venturing unit Playtika Growth Investments and will invest up to \$400m through the vehicle. The fund will target domestic digital entertainment and consumer internet companies, particularly those with annual revenues of \$10m or with proven business models that are profitable or close to break-even. Founded in 2010, Playtika develops immersive social games and claims to have been the first company to bring free-to-play casino-type games to social networks.

US-based media and entertainment group DMG Entertainment launched strategic investment fund DMG Capital Group with \$300m that will go to entertainment, technology and media companies. DMG Entertainment operates across various branches of the entertainment industry, including film and television production, games, live entertainment experiences and comic books. The fund will invest in film, immersive media, gaming, entertainment licensing, broadband, free and paid television, e-commerce, mobile and over-the-top video technology together with media, entertainment and communications software and services.

China-based cybersecurity technology provider Qihoo 360 Technology partnered the municipal government-owned Beijing Cultural Centre Fund to set up a RMB1bn investment fund. The fund will target early and growth-stage companies in the internet and cultural sectors, including businesses focusing on entertainment and new media information.

Media sector fundraising initiatives 2011-18



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Top media sector funding initiatives over the past year

Funding initiative	Type	Funds raised	Location	Focus
Playtika Growth Investments	CVC unit	\$400m	Israel	Domestic digital entertainment and consumer internet companies, particularly those with annual revenues of \$10m or with proven business models
DMG Capital	CVC unit	\$300m	US	Film, immersive media, gaming, entertainment licensing, broadband, free and pay television, e-commerce, mobile and over-the-top video technology together with media, entertainment and communications software and services
Qihoo 360 Beijing Fund	VC fund	\$156m	China	Early and growth-stage companies in the internet and cultural sectors, including entertainment and new media information
Games Investment Division	CVC unit	\$100m	Russia	Domestic and international game studios and publishers
AT-II Investment Limited Partnership Fund	VC fund	\$67m	Japan	Social media and online games and advertising
Crosslantic Capital	VC fund	\$57m	Germany	Media and entertainment
GMG Ventures	CVC unit	\$55m	UK	Artificial intelligence and machine learning journalistic tools, adtech, reader and customer experience enhancement, payment and content distribution
Akatsuki Entertainment Technology Fund	VC fund	\$50m	Japan	Augmented reality and other entertainment technologies in animation, film, gaming, music, sports, eSports, live and location based entertainment markets
Vision Esports Fund	VC fund	\$38m	US	eSports businesses and hosting production studios and eSports training facilities
Callodorado App Growth Fund	VC fund	\$12m	Denmark	Developers of mobile apps that use its caller ID-based advertising platform
Rabo Food and Agri Innovation Fund	VC fund	–	Netherlands	Early-stage food and agriculture technology developers
Tyson-Plug and Play incubator	Incubator	–	US	Early-stage companies operating near Silicon Valley-based Plug and Play and Chicago-based 1871

Russia-based online communications and entertainment provider Mail.Ru launched a corporate venture capital unit that will invest up to \$100m in game developers. Mail.Ru's Games Investment Division will invest in domestic and international game studios and publishers. It has already allocated the first \$10m of capital. In addition to equity financing, the fund will also consider acquisition deals and royalty investments. Mail.Ru's gaming business currently consists of more than 50 games with a total audience of roughly 100 million worldwide.

Gree Ventures, the corporate venture capital arm of Japan-based digital media company Gree, closed its second fund at \$67m. Founded in 2011, Gree Ventures operates from offices in Japan and Singapore, and typically invests between \$300,000 and \$3m in each portfolio company. Its parent company, founded in 2004, has interests in social media and online games and advertising. The fund, AT-II Investment Limited Partnership Fund, was oversubscribed above its \$60m target, though Gree Ventures' website states the fund size is \$70m. With this second fund, Gree Ventures will look to expand its focus from Japan and Southeast Asia to India.

Germany-based media group ProSiebenSat.1 divested a significant part of its media-for-equity portfolio to US-based private equity firm Lexington Partners for a mid-eight-digit euro figure (€50m = \$57m). ProSiebenSat.1, which operates corporate venturing unit SevenVentures, makes financial investments in startups and also participates in media-for-equity deals that involve it acquiring stakes in companies in return for providing advertising. The deal will include minority stakes in up to 16 companies held by ProSiebenSat.1 subsidiaries including SevenVentures, and the assets will be transferred to a new fund called Crosslantic Capital.

UK-based media company Guardian Media Group (GMG) launched £42m (\$55.3m) corporate venturing fund GMG Ventures to make early-stage investments in media technology developers. GMG is the owner of the Guardian, the UK left-leaning daily newspaper with an online platform that attracts 140 million unique users each month. GMG Ventures will invest in startups working on technologies covering areas like artificial and intelligence and machine learning journalistic tools, adtech, reader and customer experience enhancement, payment, content distribution and tools enabling readers to respond to content through external means.

Japan-based mobile game developer Akatsuki launched a \$50m investment fund that will target startups focusing on AR and other entertainment technologies. Founded in 2010, Akatsuki develops social games for use on mobile devices. Akatsuki aims to use Akatsuki Entertainment Technology Fund to encourage startups to create new content and services in the animation, film, gaming, music, sports, eSports, live and location-based entertainment markets. The fund will initially focus on AR, which Akatsuki believes has potential for use in the entertainment industry, but will also look to invest in VR and mixed reality technologies.

US-based private equity firm Vision Venture Partners launched an eSports-focused fund with \$38m from fundraising led by Evolution Media, an investment firm co-founded by talent-spotter Creative Artists Agency. The fund's other limited partners include baseball franchises the New York Yankees and St Louis Cardinals, and Shamrock Holdings, an invest-



SECTOR FOCUS

ment firm owned by the estate of Roy Disney, a former senior executive at Walt Disney.

Denmark-based mobile advertising software provider Calldorado launched a \$12m investment fund to back developers of mobile apps that use its caller ID-based advertising platform. Calldorado's software development kit helps developers monetise their apps through advertisements displayed on a caller ID screen that can be added as a tool. Calldorado App Growth Fund will provide capital in the form of a marketing budget and will generate returns through revenue sharing, as opposed to taking an equity stake in startups. The company plans to focus on communication, utility, productivity, tools and business apps, and the fund is intended to help developers cover user acquisition costs until adoption rates become strong enough to support their business.

People

Beth Ferreira left her role as managing partner at WME Ventures, the corporate venturing arm of talent agency William Morris Endeavor, to return to venture capital firm FirstMark Capital as managing director. Ferreira first joined FirstMark Capital in 2011 as a venture partner while also working as chief operating officer of e-commerce company Fab. WME Ventures brought Ferreira on board in 2015 as one of its founding partners and she helped launch its \$50m first fund, which closed in November 2016.



Ferreira

Jennifer Li, chief executive of Baidu's \$3bn strategic investment arm, Baidu Capital, stepped down as the company's chief financial officer. Herman Yu, who held the position at another internet company, Weibo, will replace Li, who is stepping down after almost 10 years, though she will continue as Baidu Capital CEO. Yu was finance chief at Weibo for two years, having previously worked at design software publisher Adobe Systems and electronic payments processor Verifone.



Li

GV, a subsidiary of Alphabet formerly known as Google Ventures, hired Craig Kornblau as its first media and entertainment adviser. Kornblau was president of Universal Pictures, the film studio overseen by NBCUniversal and owned by Comcast, between 1999 and 2014. Kornblau will work with the corporate venturing unit's entire portfolio but will also advise on investments in the entertainment sector.

Avid Larizadeh Duggan left her general partner role at GV for an executive role at music publisher and royalty collection service Kobalt. Larizadeh Duggan joined GV in 2014, from Boticca, the luxury fashion e-commerce platform she co-founded in 2010 and where she served as chief operating officer. Kobalt has hired Larizadeh Duggan as chief strategy and business officer and executive vice-president.



Larizadeh Duggan

Matthew Lee, former CEO and managing partner at IDG's corporate venturing unit in Korea, has become CEO and "token economy architect" at Unblock, a blockchain technology and R&D team of Japan-based communications provider Line. Lee had left IDG Ventures Korea in early 2016 and has spent the past two years or so as managing partner of Cognitive Investment before moving to Unblock and AD4th, another decentralised ledger technology provider.

SevenVentures promoted Philip Fischer to senior investment manager. Fischer joined SevenVentures a year earlier as investment manager after a role as investment banking senior associate at JPMorgan. The promotion came after Kasper Sage, a senior investment manager at ProSiebenSat.1 Media, left to become a principal at automotive manufacturer BMW's corporate venturing unit, BMW i Ventures. Earlier in the year, Florian Pauthner was promoted to chief executive of SevenVentures.

Martin Tschopp was appointed chief operating officer of Naspers Ventures, the corporate venturing arm of Naspers. Naspers launched Silicon Valley-based Naspers Ventures in May 2016 in a bid to diversify its venture capital activities, which had till then been concentrated on traditional internet-focused areas such as e-commerce, classified listings and payment services. Prior to Kiva, Tschopp spent almost 12 years at e-commerce marketplace eBay in various roles, ultimately rising to the position of general manager of eBay Advertising.



Tschopp

Marek Rubasinski, director of UK-based media company Sky's startup investments and partnerships team, left to pursue new opportunities. Rubasinski had held the position since August 2015 and was in charge of Sky's engagement with technology startups, chiefly through Sky Ventures. He joined Sky in 2008 from professional services firm Accenture.



Rubasinski

Comcast Ventures, the corporate venturing arm of Comcast, hired Gil Beyda as managing director and promoted Daniel Gulati to partner. Beyda had spent the past nine years as managing partner of Genacast Ventures, a seed-stage fund formed in partnership with Comcast Ventures. He will continue to run Genacast while also investing in later-stage companies for Comcast Ventures. Before joining Genacast, Beyda was the chief technology officer of targeted advertising network Tacoda.

Rachel Lam, former head of corporate venturing unit Time Warner Investments, has set up venture capital firm Imagination Capital with her former CEO, Richard Parsons. She said Imagination Capital was targeting \$250,000 to \$500,000 in initial investments in institutional seed and A rounds for about 20 to 25 startups in eSports, big data, machine learning and digital media. Parsons, who stepped down as CEO of Time Warner in 2007, is now CEO of the Los Angeles Clippers basketball franchise.

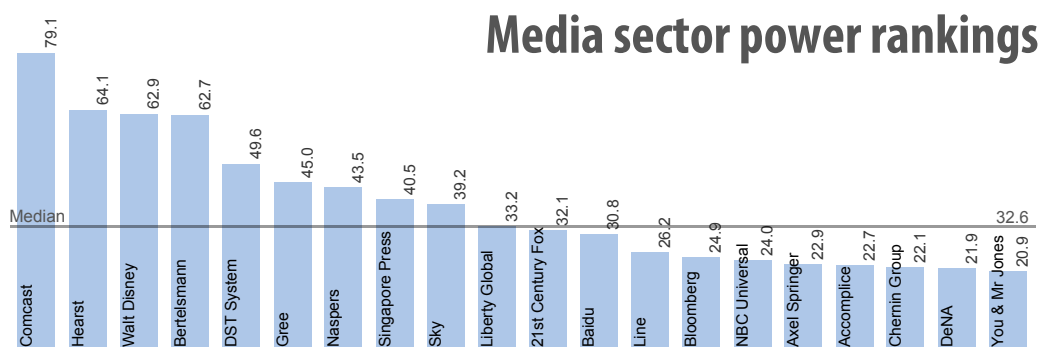


Lam



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Bruce Haymes, a New York-based managing director at Nielsen Ventures, the corporate venturing unit of media information provider Nielsen, left to pursue an undisclosed opportunity. Haymes said: “After 10 years with Nielsen and seven years running Nielsen Ventures and Nielsen Innovate – the incubator formed in Israel by Nielsen and VC fund Partam Hi-Tech – I have accepted an amazing opportunity elsewhere.” ♦



University and government backing for media businesses

Over the past 12 months, there have been relatively few university investments and commitments to university spinouts in the media sector reported by our sister publication, Global University Venturing. Research-orientated academic institutions have backed or spun out companies developing software or hardware technologies that are tangentially related to the media sector.

A case in point was US-based social media management startup Soci. Stanford University’s Daper fund took part in an \$8.5m series A round for the company, co-led by VC firms Vertical Venture and Grayhawk Capital. Founded in 2012, Soci develops a social media management service, allowing businesses and agencies to run large-scale campaigns across multiple social media accounts and services, with the ability to identify social content attractive to target audiences.

BlueFox, a US-based company developing customer engagement services for brands and retailers previously backed by Ecole polytechnique fédérale de Lausanne, raised \$7m in its series A round from a consortium including electronics maker Panasonic and technology services platform Pentalog. Founded in 2016, BlueFox operates a cloud platform to measure foot traffic and customer engagement in physical locations. The technology relies on sensors that detect smartphone signals rather than traditional Bluetooth beacons. The technology can also be used in homes to detect parties organised either by guests staying over through a service such as Airbnb or by children while parents are away.

CY Vision, a US-based computational holographic technology spinout of Koç University, has closed a \$7m series A round led by home and professional appliances manufacturer Vestel’s corporate venturing subsidiary Vestel Ventures. Vestel Ventures, a subsidiary of the Turkey-based Vestel’s technology investment arm Zorlu Holding, was joined by Intel Capital, the corporate venture capital vehicle of Intel. Founded in 2016, CY Vision has developed a holographic display platform for use in AR and VR applications. The spinout is exploiting research conducted by Hakan Urey, professor of electrical engineering at Koç. The technology is intended to eliminate problems and limitations of current AR and VR hardware, such as bulky glasses, motion sickness and a limited field of view.

Vidrov, a US-based computer vision spinout from Columbia University, obtained \$1.25m in a seed round led by Samsung Next, a corporate venturing subsidiary of technology vendor Samsung. The round was backed by Verizon Ventures and R/GA Ventures, respective corporate VC divisions of telecoms firm Verizon Communications and advertising agency R/GA. Founded in 2016, Vidrov is building a computer vision-based system to allow video publishers to automatically categorise clips according to their content. The platform uses transcription, face detection and scene detection to formulate metadata to be matched against content elsewhere.

Government investments in the media sector, reported by our other sister publication Global Government Venturing, followed a different pattern. Over the past year, governments and government-backed investors placed bets on a wider range of emerging media enterprises – from news aggregation through video entertainment to AR applications. Governments and government-backed investors have a broader mandate, as they typically intend to stimulate innovation in their economy across all sectors.

There were some notable rounds where government investors co-invested with corporates, aside from the \$1bn round raised by sports e-commerce business Fanatics, which featured Singapore government-backed firm Temasek, as men-



SECTOR FOCUS



tioned in the main sector focus.

Yidian Zixun, a China-based news aggregation platform backed by media company Phoenix New Media, raised a \$112m series E round from investors including government guidance fund Long De Cheng Zhang Culture Communication. The round, which also featured two unnamed participants, valued the company at \$1bn. Founded in 2010, Yidian Zixun has built a personalised news app that has accumulated 52 million daily active users. Despite being launched two years before Toutiao, a rival currently raising money at a \$20bn valuation, it was slower to commercialise its offering.

PCCW OTT, a China-based operator of music and video streaming platforms, raised \$110m from investors including Singapore state-owned investment firm Temasek. The round also included Hony Capital, the private equity arm of conglomerate Legend Holdings, and Foxconn Ventures, the invest-

ment subsidiary of contract electronics manufacturer Foxconn. PCCW OTT operates three over-the-top – internet-only – media and entertainment platforms, such as video-streaming service Vuu, which focuses on Asian content with local language subtitles available soon after initial broadcast on television.

Canada-based social fiction writing platform WP Technology, backed by state-owned pension fund Omers, is to receive approximately \$50m from a consortium led by Tencent, which was reported to have provided \$40m for the round, valuing WP Technology at about \$400m post-money. Founded in 2006, WP Technology operates Wattpad, an online platform for fiction writers with approximately 60 million users.

China-based online news platform 36Kr Media raised RMB300m (\$45.4m) in a series A round that featured Hangzhou Finance Investment, an investment firm owned by the government of Chinese city Hangzhou. Streaming service Baidu Video and advertising agency Focus Media Information Technology also participated in the round, which was co-led by venture capital firm Gobi Partners and investment firm China Prosperity Capital. 36Kr Media was spun out of technology group 36Kr in 2016. The company operates a news portal focused on the VC and technology ecosystems, and organises industry events.

US-based VR company Within raised \$40m in a series B round co-led by Temasek and investment firm Emerson Collective. The round included entertainment company 21st Century Fox, advertising agency WPP, media company Macro Ventures and Raine Ventures, the investment arm of financial services firm Raine Group. Founded in 2014 as Vrse, Within has developed VR and AR content technology such as its Goldilocks storybook, which allows children to read a story aloud and see characters they mention appear on their mobile screen. ◆

SECTOR FOCUS

Comment: Why Meituan-Dianping's expansion makes sense**Hans Tung and Zara Zhang, GGV**

Providing a multitude of services as a “super app” allows Meituan-Dianping to generate significant revenues from merchants and avoid using capital-intensive subsidies to lower prices for consumers and also potentially disrupt traditional advertising-only media models. This is a fundamentally sound business model that will be hard for competitors to beat. Super apps, if thoughtfully designed, can be beneficial to both the company and the consumer.

There seems to be no end to the ambitions of Wang Xing, the 39-year-old CEO of Meituan, a \$30bn Chinese company that is fast becoming a “super app” for services.

Meituan now offers at least a dozen services, from restaurant reviews and vacation home rentals to offline grocery stores. The diversity of its offerings defies any comparison to US equivalents. In March, Meituan launched its ride-hailing service in Shanghai and already has significant market share in several key markets. In April, Meituan made headlines after acquiring Mobike, one of China's top bike-sharing companies, for \$2.7bn, plus debt of close to \$1bn. Wang's vision for Meituan is to be an “Amazon for services” in China, and beyond.

In the US, most companies aim to tackle a single pain point for a specific type of consumer. By contrast, in China there are several super apps like Meituan that are tackling not one but a dozen pain points for a broad base of consumers. Yelp does offer more services than most US apps, but it still falls short of Meituan's offerings. Granted, users in the US and China have different consumption habits, and many commentators in China have called Meituan “unfocused”. But US companies can still draw a lesson from companies like Meituan that have cleverly taken advantage of the synergy among various consumer services, creating a varied but sound business model.

Meituan's secret weapon lies in its one-stop-shop approach. Because Meituan offers so many services, it gives merchants multiple channels to reach the consumer. Merchants can sponsor Groupon deals on the Meituan app, advertise beside reviews on the Dianping app, and even offer consumers free rides to their premises through its ride-hailing service. For example, restaurants in remote areas could attract new customers by offering free rides so customers can easily get to the restaurants. Instead of paying to advertise on search engines like Baidu, merchants may reach customers more effectively by partnering with Meituan on multiple fronts instead. Many merchants have high margins but lack volume, and are thus willing to offer discounts on Meituan to get more orders.

Having multiple channels allows Meituan to generate significant revenues from merchants and avoid using capital-intensive subsidies to lower prices for consumers. This is a fundamentally sound business model that will be hard for competitors to beat.

For companies that offer only one service, such as ride-sharing, reaching profitability requires either raising prices on consumers or paying drivers less. Whenever it lowers prices, it becomes capital intensive. But Meituan can rely on a new source of subsidy in the form of marketing dollars from its merchants to lower the price of ride-sharing services for consumers. The lesson is that companies offering a single service may offer clear value propositions to users but will have inherent limitations. Super apps, if thoughtfully designed, can offer superior value to the company, its merchants and consumers.

From consumers' point of view, if they are already using Meituan to decide which restaurant to go to, doesn't it make sense to order a ride to that restaurant with one click, within the same app? If they are using Meituan to rent a vacation home, doesn't it make sense to book the flight within the same app?

As Wang has said before: “It is the same people who go to restaurants, order food delivery, and hail taxis. It looks like I am doing everything, but I am only doing one thing – an online platform that sells services.” ♦

Note: Didi Chuxing, Airbnb, Ctrip, Bytedance (Toutiao), Meili, and Hellobike are GGV portfolio companies.

Hans Tung is an early investor in Dianping, which merged with Meituan in 2015. This is an edited article first published at <https://hans.vc/why-meituan-dianpings-expansion-makes-sense/>

“It looks like I am doing everything, but I am only doing one thing – an online platform that sells services”

Wang Xing



COMMENT

Entrepreneurial success and CVC: unravelling the paradox

Tom Edwards, 2017's top doctoral student of the year, Pace University

I began my doctoral work in management after a long career as a new product development engineering executive and soon became struck by the lack of research into how entrepreneurs benefited from corporate venture capital investments.

This lack of research insight exacerbated the concerns in the research literature that corporate investors are inhibited from making valuable investments due to entrepreneur fears of investor appropriation of their valuable technology. These issues resonated with my experience of negotiating with entrepreneurs to enter cooperative projects with the corporations I represented. I had found my dissertation topic and set out to investigate the antecedents and moderators that will act on a corporate venture capital investment relationship to result in a mutually satisfactory conclusion to that relationship, either by acquisition of an entrepreneurial firm by a corporate investor or by initial public offering (IPO).

My research utilised both quantitative analysis of patent citations and qualitative interviews with entrepreneurs and corporate investors to investigate the success of a corporate venture capital investment from the viewpoint of the entrepreneurial firm receiving the investment. The existing research literature overwhelmingly views this construct from the viewpoint of the corporate investor by defining a successful investment as one from which the investor has harnessed multiple benefits. My work investigated the outcome of corporate venture capital investments that are likely to be viewed as a success by the entrepreneurial firm founder, either an exit from the firm by acquisition or an IPO. The effect of relative learning between the entrepreneurial firm and the corporate investor was studied with the expectation that an entrepreneurial firm that learns from the corporate investor will increase in value and be more likely to achieve an attractive exit by either acquisition or IPO.

Relative learning between the firms was studied by tracking the citation of one firm's previous art by the other firm in successful patent applications after the initiation of a corporate venture capital investment. The relationship between entrepreneurial firm learning and attractive exits were tested by logit and least squares regression methods. Surprisingly, considering the existing research literature, the flow of technological knowledge from the entrepreneurial firm to the corporate investor was found to be negligible while entrepreneurial firm learning from the corporate investor was found to be significant.

This unanticipated entrepreneurial firm learning paints a significantly different picture of the corporate venture capital relationship than that portrayed in the existing research literature. The entrepreneurial firm does not appear to be a passive partner wary of a corporate investor that will "exploit the information, imitate the invention, and leave the entrepreneur empty-handed"¹. The evidence that learning by the entrepreneurial firm is more common than learning by the corporate investor calls into question the idea that corporate venture capital investments are "instrumental in harvesting innovation from these entrepreneurial ventures"².

The results of this study argue for a model of entrepreneurs that not only effectively defends their core technology from appropriation but aggressively transfers technological knowledge from the corporate investor. Additionally, the results establish that entrepreneurial firm learning mediates the relationship between a corporate venture capital investment and an exit by IPO.

The findings of this study lead to the conclusion that a corporate venture capital relationship is not driven by knowledge appropriation by the corporate investor. In fact, the flow of technological knowledge in the opposite direction is more common and can be demonstrated to increase the likelihood of a corporate venture capital investment resulting in the highly positive outcome of an IPO for the entrepreneurial firm.

The phenomenon that emerges from this work is twofold. First, entrepreneurial firms appear proactively to protect their valuable knowhow after accepting a corporate venture capital investment rather than simply avoiding the investment and thus eliminating not only the threat of appropriation but the benefits of the strategic and marketing insights that accompany a corporate investor. Second, some entrepreneurial firms have learned how to prevent technological spillover from themselves to their investor while learning from that corporate investor. This underlying phenomenology does not appear to be reflected in the existing research literature and is deserving of further investigation. The effect of entrepreneurial firm learning on the likelihood of an IPO exit suggests that future work investigate the phenomena of learning by the venture firm. ♦

Notes

- 1 Dushnitsky, G, & Shaver, JM (2009). Limitations to interorganizational knowledge acquisition: the paradox of corporate venture capital. *Strategic Management Journal*, 30(10), 1045-64.
- 2 Dushnitsky, G, & Lenox, MJ (2005). When do incumbents learn from entrepreneurial ventures? *Corporate venture capital and investing firm innovation rates*. *Research Policy*, 34(5), 615-39.



GAULE'S QUESTION TIME

Eight-year review

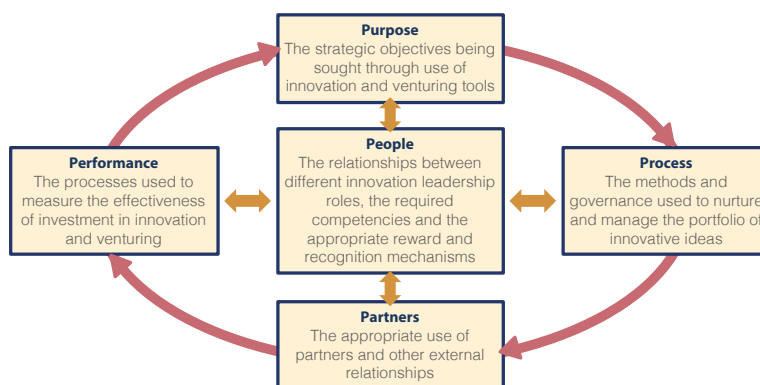


Andrew Gaule, CEO, Aimava

Nearly eight years of interviews and more than 100 podcasts and videos have given us great insights into senior executives and leaders of Innovation and corporate venturing all over the world. The objective of this overview is to highlight some of the key messages that illustrate a number of the best approaches and learning. This does not mean that other interviews and organisations were not exemplars, but there is only so much space.

A key framework I will use to illustrate the approaches is taken from my book – Purpose to Performance: Innovative New Value Chains – which outlines the five Ps of innovation and venturing, used for over 15 years to help leading corporates drive their corporate venturing and strategic innovation.

- **Purpose.**
- **Process.**
- **People.**
- **Partners.**
- **Performance.**



The examples are taken from different industries, different technology changes, varying business model disruption, which means there is no one size fits all. The collision of new materials, the internet of things, mobile devices, cloud data and artificial intelligence is creating the new opportunities which require a better approach to strategic innovation and venturing.



Purpose

Understanding and communicating your strategic objectives and altering those strategic objectives as you learn more about the technology, startups disrupting your sector and changing business models is a key first step.

Mehmood Khan, PepsiCo's vice-chairman and chief scientific officer, global research and development, illustrated the PepsiCo strategic objectives for achieving performance with purpose, and he outlined the purpose of the innovation and venturing initiatives.



Mehmood Khan

"At PepsiCo, we believe the products we sell, the way we treat our planet and the opportunities we create for people around the world together are the true measure of a successful 21st century company. By improving the way our food and drinks are grown and made, we continue to reduce our environmental footprint and create more sustainable prosperous communities around the world." He then outlined the deliverables and approaches.

Rob van Leen, chief innovation officer and member of the executive committee at Royal DSM, was interviewed in 2012 and 2017. Over this period it is interesting to see how the focus areas changed and innovation has been elevated to an executive committee role. The DSM example I illustrated in my 2006 book, and again in 2017, as it shows the long-term thinking and transforming business from Dutch State Mines mining coal in the Netherlands to bulk chemicals, speciality chemicals, becoming a "global science-based company active in health, nutrition and materials".

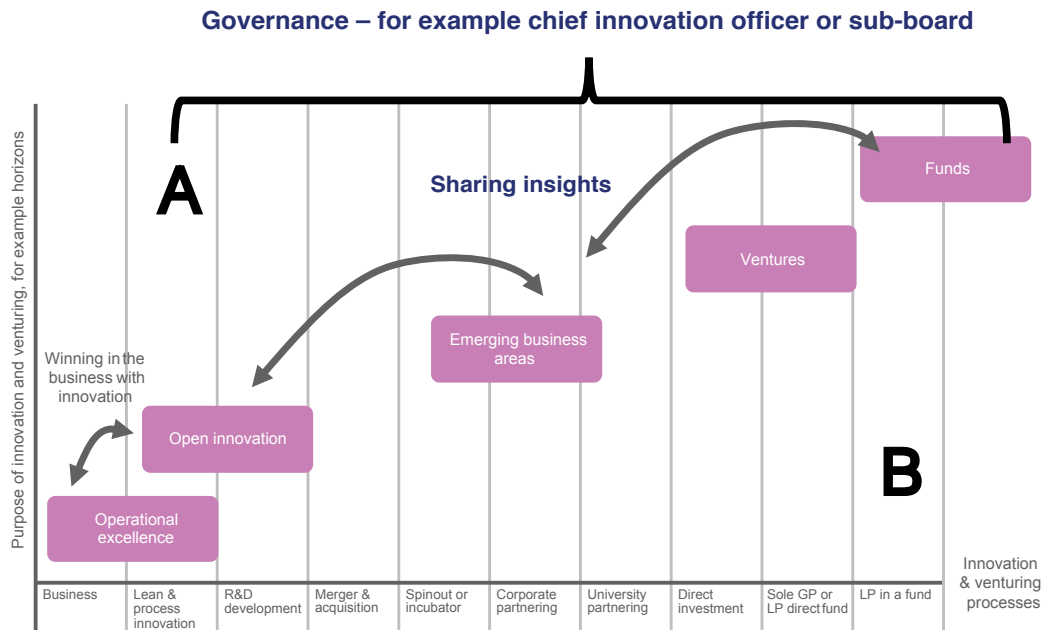


Rob van Leen

The way that DSM looks across the various process of innovation and venturing from fund investments, direct investments, building "emerging business areas", M&A and R&D to deliver the innovation and transformation is a good case. This chimes with many organisations where I see these different processes.



GAULE'S QUESTION TIME



The spectrum of innovation and venturing processes

Process

To have effective strategic innovation there are a range of processes that need to be deployed effectively by corporates. The extensive range of interviews have illustrated over the years the different processes to align with the strategic innovation purpose.

Investment in a fund as a limited partner (LP) is an approach often used by corporates to understand the investment approach, gaining traction in a local ecosystem, achieving dealflow and gaining insights on ventures.

Min Zhou of China Materialia gave us great insights into the reasons for leading corporates, such as General Electric, Samsung, BASF and Sabic, to invest in its second fund.

Corporates can come together for a jointly managed fund, and an example is Mainport Innovation Fund which was described by Ignaas Caryn who led the KLM venture fund.

There is a corporate venture capital approach in which the corporate is the sole LP. Tony Askew, founding managing partner of REV Ventures – the fund formed by Reed Elsevier, now Relx – has been leading the independent investments in strategically important sectors. Ulrich Quay of iBMW Ventures describes the approaches BMW take and why the company has transitioned to a separate limited partner-general partner fund structure. David Atkinson of Circadia Ventures, of the Tate & Lyle fund, has also illustrated the longstanding success of an LP-GP fund.

There are pros and cons to the structures of the CVC and organisations need to understand the alignment of internal and external characteristics.

The more common form of CVC structure is an allocated budget from the corporate to be invested annually with an announced duration and objective structure. There are many examples of these in our series of interviews. The longest-running and most active in its industry and technology sectors is Intel, and the interviews with Arvind Sadhani the founding leader of Intel Ventures, and Abdul Guefor give a comprehensive overview of the purpose to drive Intel strategy, and the process for the sizable global team.

Tom Heyman of Johnson & Johnson Development Corporation outlined one of the oldest CVC units – it started in 1982 investing in the development of the health ecosystem.

There are numerous examples from a range of industries, such as financial services, for example Michael Smith of USAA and Ben Letalik of TD Bank.

Incubation is another approach to encouraging and supporting innovation, such as developing an organisation's own



Min Zhou



Ignaas Caryn



GAULE'S QUESTION TIME

incubator space, like Microsoft Accelerator as outlined in the interview with Zack Weisfeld, and the connection with the Microsoft Venture fund outlined in the interview with Nagraj Kashyap.

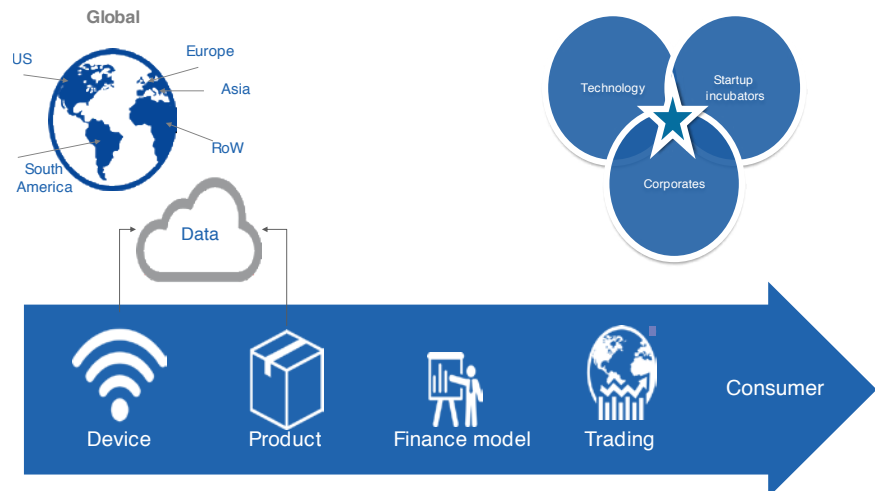
Running an incubation process without a fixed location is another approach highlighted by PepsiCo Greenhouse, which was supported by the Aimava team, to develop the organisation's capabilities and processes. Jan Amat outlined the process. From more than 120 applications, eight startups were chosen and received €25,000 (\$30,000) and entry into a six-month incubator program. The winner of the first program was Erbology which gained another €100,000.

Unilever Foundry is an approach that worked with many global incubators and innovation centres to collaborate on promoting innovation. This approach was outlined in an interview with Jeremy Basset.

Connecting the startups and technologies to create new business models is the most strategic process and mature corporate venturing approach. Two interviews with Bill Taranto illustrate the approach of investment, collaboration and then private equity consolidation most effectively. Examples from GE in its transformation to digital service company and changes in the transport and automotive sectors are others that illustrate the change to strategic venturing approaches.

Making innovation and corporate venturing truly strategic is a whole topic in itself and was outlined in the book Purpose to Performance: Innovative New Value Chains

Innovative new value chains



Connecting tech, startups and corporates globally to create new business models



the change process.

The people we discuss in the interviews cover the executive leadership of the corporate, leaders of the innovation and venturing, team members, business unit leaders, startup founders and the relationships among these. The motivations and rewards for the various people are often also addressed.

Partners

Organisations are innovating outside their current abilities and perspective and therefore they need to work with partners. In this strategic innovation and corporate venturing context, there are a range of partners who have been illustrated by a number of very informative interviews.

Gerald Brady of Silicon Valley Bank spoke of the role of an important partner in the financing and support of ventures and VCs. Peter Cowley, who has been recognised as a global business angel, shared his perspective on attributes and

People

People are central to the success of strategic innovation and venturing. People are key in the interviews with their vision, communication, aligning of objectives and motivations. In addition to the interview cases I have already mentioned, I would highlight Sue Siegel at GE Ventures on the importance of diverse teams and engaging the business change. Dominique Mégret at SwissCom has spoken on programs I have led and in interviews on the importance of building trust and delivering results to be able to make CVC truly strategic.

Jacqueline LeSage Krause of Munich Re also illustrates the engaging the business and venturing in



GAULE'S QUESTION TIME

benefits of early-stage ventures. Tal Badt of XLab at Tsinghua University and Quentin Compton-Bishop outlined in their interviews the role of universities, tech transfer and incubators.

Many more partners can be an inspiration and support for innovation and venturing, such as government, with Paul Morris of UKTI illustrating that role. Iain Bomphray of Williams Advanced Engineering illustrates another approach to partnering with technical expertise from a corporate to other corporates and startups to develop new solutions and business models.

The interviews with Wendy Lung and Claudia Fan Munce of IBM Ventures show that partnering can be a more significant approach to corporate venturing and it is not necessary to invest to work effectively with startups.



Performance

Organisations need to show their benefits and that they are delivering on their purpose. There is often a debate on whether the innovation and venturing are strategic or financial. In a number of interviews we have shown that to be effective, organisations need to gear their venturing for financial returns in strategic areas. "You do not stay strategic for long if you are not making a financial return" is the bottom line we hear from leaders of CVC units that have been successful over many years and are respected inside and outside their organisations.

Abdul Guefor of Intel in his interview talked about the metrics that have been used over the years and the methods of aligning the investment and corporate strategic objectives.

In this review of nearly eight years of interviews I have not been able to cover all the key messages or insights from all the interviews of some great leaders of global organisations.

For a full list of interviews and categorisation of industries, process approaches, technology and geography interests, contact Marie O'Connell at Aimava: marie.oconnell@aimava.com, and see www.globalcorporateventuring.com for the Gaule Question Time archive ♦

You can listen to all the interviews on a podcast, subscribe at gaulesqt.podomatic.com. Andrew Gaule supports innovation programs and collaborations with "innovative new value chains" in global organisations. If you have interview ideas, email andrew.gaule@aimava.com or James Mawson jmawson@globalcorporateventuring.com



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Bill Taranto
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brands under
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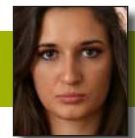
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Israel – 10 years on, what is the status of the ‘startup nation’?



Alice Tchernookova, features editor



Referred to as the “startup nation” is hardly original now. Having first arisen in 2009 with the publication of Saul Singer’s and Dan Senor’s book *Start-up Nation*, the nickname has remained associated with the country – and not without good reason.

In spite of having a population of just 8.5 million people, which places it 100th globally, Israel has one of the world’s most developed and active startup and venture communities.

With startups estimated to number between 4,000 and 5,000, and the world’s highest concentration of them – one startup per 400 people and one every 20 or so square kilometres – the Israeli ecosystem is considered to be the fastest-growing after Silicon Valley, and incidentally as one of its most serious contenders apart from far larger peers, such as China.

According to figures published by the Israel Venture Capital (IVC) Research Centre, between 1997 and 2017, Israel was home to 356 incubators and accelerators and 365 foreign research and development (R&D) centres. Throughout the period, exits in the country generated an estimated \$143bn in capital, including \$132bn through M&A transactions and \$11bn through initial public offerings (IPOs). Around \$20bn of capital was raised by VC funds, while 1487 life sciences companies raised \$13.5bn, 505 cybersecurity companies raised \$5.6bn, and 16,000 high-tech companies were established, 8,000 of which remain active.

According to IVC estimates, Israeli startups raised \$5.24bn of capital in 2017, up from \$4.83bn in 2016. Deal numbers, however, dropped from 673 to 620 last year, evidencing an increase in the average funding round size. Meanwhile, VC funds raised an estimated \$1.3bn. According to IVC, Israeli startups had already received more than \$1bn in capital in the first quarter of this year – \$260m in January, \$500m in February and \$330m in March. This represented a slight increase of \$60m compared with the first quarter last year.

A third of the \$330m figure recorded in March was the \$100m round raised by Cyprus-based social trading platform eToro, led by China Minsheng Financial and joined by SBI Group, Korea Investment Partners, World Wide Invest and others. Other noteworthy funding rounds that month included a \$30m Maverick Ventures-led round raised by cybersecurity company BioCatch, with participation from American Express Ventures and online lending platform CreditEase. The artificial intelligence (AI) medical diagnostics firm Medial EarlySign also raised \$30m from a consortium of investors including the Hong Kong-based investment firm Horizons Ventures. Finally, the software-as-a-service (SaaS) security platform Luminare Security raised \$14m from investors including software provider Microsoft’s Microsoft ScaleUp accelerator.



INNOVATIVE REGION

The year 2017 also gave way to a few mega-rounds – those above \$100m – such as a \$400m round for \$4bn Comcast-backed home improvement image and services platform Houzz, a \$250m Daimler-led round for ride-sharing company Via, and a \$150m private equity round led by investment firm CVC Capital Partners for the cybersecurity technology provider Skybox Security, backed by trading and technology firm Susquehanna International Group.

Israeli startups were also subject to some major acquisitions, including the purchase by electronics specialist Sony of Altair Semiconductor, which develops long-term evolution chipsets, for \$212m. A few months later, Cisco Systems followed suit, purchasing networking chip developer Leaba Semiconductor for \$320m.

But the highlight of 2017 was certainly the acquisition by US-based chip maker Intel of autonomous driving technology developer Mobileye for an estimated \$15.3bn. This transaction was the most significant acquisition of an Israeli technology company by a foreign group to date.

Looking at corporate venture capital (CVC) more specifically, Israel has had much to offer corporate investors from around the world, as reported in a recent GCV data overview ahead of GCV's first Israel event in Tel Aviv this year. Since 2011, GCV Analytics tracked 222 corporate venture deals, with a clear upward trend over the past two or three years.

Nine years after it earned the nickname “startup nation”, Israel still seems to have a healthy and fast-developing ecosystem. What is its recipe for success?

Startup culture

When analysing a country's venture ecosystem, it seems crucial first to understand its culture and its relationship with innovation, startups and risk-taking.

In Israel's case, one fundamental element is that its people do not just “do” startups – they live and breathe startups. Israel may be the country where startup culture is the most strongly imprinted on people's minds, and where people abide by it most.

In a recent interview with San Francisco-based VC firm Index Ventures, Shimon Schocken, professor of information technologies at Interdisciplinary Centre Herzliya and the founding dean of the Efi Arazi School of Computer Science, made the following analogy: “At Harvard, when you ask a student what they want to do when they grow up, they invariably tell you something like ‘I want to be a senator’ or ‘I want to be a CEO’ or ‘I want to go into investment banking’.

“Very few students will tell you ‘I want to start up my own company’. It is not something which is expected, whereas in Israel it has somehow become almost the normal thing to do. The Jewish mother who wanted her son to become a doctor or a lawyer, now wants him to become an entrepreneur.”

Larry Loev, who for the past five years has been CEO of Ariel University's tech transfer office Ariel Scientific Innovations following a seven-year stint at Tel Aviv University, where he was director of business development for the university's tech transfer office Engineering at Ramot, has his own way of explaining the rise of Israel's startup scene.

He said: “I can see the difference in terms of how innovation is inherent to the culture here. A country's role models often determine the direction in which education is geared. Here in Israel, the role models are often successful entrepreneurs – people who launched a business, who completed a successful exit. That is what is headlined in the news, and that is what is considered success.

“It is a strongly ingrained belief that the way we measure success here is not by whether or not someone has earned an MBA or completed other business qualifications – it is relative to their path through innovation.”

This mentality, Loev added, can largely be attributed to the environment in which Israelis are born and raised. “Because we do not have a lot of natural resources and land area [around 21,600 sq km], the only thing we can rely on is pretty much brain power. The fact that we are surrounded by non-friendly states has also forced us to reach out internationally across continents – to the Far East, Europe and North America – which I think has helped us develop a sort of breakout mentality.”

But it is not just Israel's geographic position that is at the root of what is referred to by authors Senor and Singer as an “adversity-driven” culture. It is also the unique history of its people, inseparable from the Holocaust and its memory.

As I spoke to Loev on Yom HaShoah (Holocaust Remembrance Day) on April 12, he continued: “We have a very close-knit society, and one that is very much built on the idea that it is us against the world, which in turn creates a sense of having to show everybody how good we are. It is a way of saying that we have to be those achievers, we have to justify our survival.

“These are values and principles that can hardly be duplicated in any other country around the world. Certain things are just ingrained, inborn, and are just part of a population's DNA.”

Another typical national feature is the so-called “chutzpah” – translating as nerve, impudence or audacity – which is generally associated with a risk-taking, rule-breaking, a can-do attitude, and with the idea that people should never be



INNOVATIVE REGION

satisfied with what they are given and should always look for improvement. It is also synonymous with the belief that failure is an essential part of one's path to success.

Quoted by Index Ventures, Gilad Japhet, founder and CEO of online genealogy platform MyHeritage, said: "Chutzpah in Hebrew and Yiddish is that feeling that I can do something, even if you tell me that I cannot. Israelis are very creative problem-solvers – they just improvise and break the rules, and breaking the rules means you do not follow protocol. If the standards and norms are blocking your growth you invent new ones. Chutzpah, I think, really characterises Israeli entrepreneurs. They never take no for an answer. If something seems impossible, they just find a loophole and solve it that way."

In their book, Senor and Singer expressed a similar thought in a somewhat more lighthearted way: "When an Israeli man wants to date a woman, he asks her out that night. When an Israeli entrepreneur has a business idea, he will start it that week."

All the different aspects that characterise Israel's population seem crucial to understanding the success of its venture ecosystem. "All this has contributed to creating an atmosphere that lends itself very well to the spirit of venture, entrepreneurship and innovation," Loev added.

Another parameter is, however, paramount in understanding the shaping of Israeli culture: the central role played by its army.

The military

Israel is one of the few countries where military service is mandatory for both men and women. Men have to serve for three years, women for two. This rite of passage constitutes a milestone in every young Israeli's life.

Speaking to GCV following her nomination as a 2018 Rising Star, Merav Rotem Naaman, managing director at Verizon Ventures Israel, said: "[In Israel] 18-year-old kids have to serve in the military and take on responsibilities that for most people take decades. I grew up in this environment idolising my parents, grandparents and the other pioneers who lost everything in the world wars and came to Israel to rebuild their lives and a new home.

"From a very early age, I was determined to create my own path, to define my own destiny and to take advantage of the opportunities that life presented. Asking questions and trying and failing were the norms. Entrepreneurship was everywhere and in everything, and in me."

Rotem Naaman's statement is testimony to the way the army can contribute to shaping young people's minds in Israel.

Ariel University's Loev added: "A lot of our relationships are forged during our military service. We have an extremely advanced army, made of few soldiers but very strong on the high-tech front. Many connections – on the human and technological fronts – are built through the army system, so much so that after release, these relationships often continue within the high-tech community and we benefit from them on many levels."

Aside from the impact it has on young minds, the Israel Defence Forces also plays a key role in stimulating technological innovation in the country. Several intelligence units have, for instance, been created within the army, aiming to train cybersecurity experts and hackers.

The most famous of these is probably Unit 8200, founded in 1952 and whose main role is to collect signal intelligence (sigint) and code decryption on Palestinian territories and in the wider Middle East. Thanks to the tech training received in such units, army veterans frequently go on to create successful businesses. This was the case for Gil Shwed, who founded the cybersecurity group Check Point Software Technologies, or for Uri Levine, who developed the traffic navigation app Waze, sold to Google in 2013 for \$1.3bn.


According to Forbes, around 90% of Israel's intelligence material currently comes from Unit 8200, and an estimated 1,000 companies have been founded by its alumni.

As a side effect, investments in Israel's cybersecurity sector keep expanding, with over \$800m raised and 60 startups launched in 2017 alone.

Cybersecurity is far from the only thriving sector in Israel, so it is worth looking at the bigger picture.

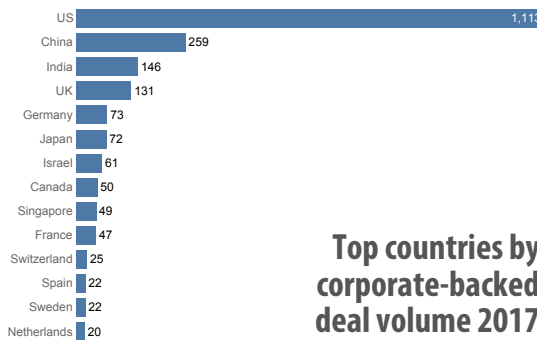
Corporate venturing

CVC activity in Israel has been subject to a consistent rise over the past few years. Between 2014 and 2017, deal volume grew from 21 to 61 deals, while deal value progressed from \$359m to around \$1.02bn, according to GCV Analytics. In terms of worldwide ranking, this positioned the country as ninth in terms of raised capital, right after Germany (\$1.04bn) and before Canada (\$914m), and seventh in terms of deal volume, between Japan (72) and Canada (50).

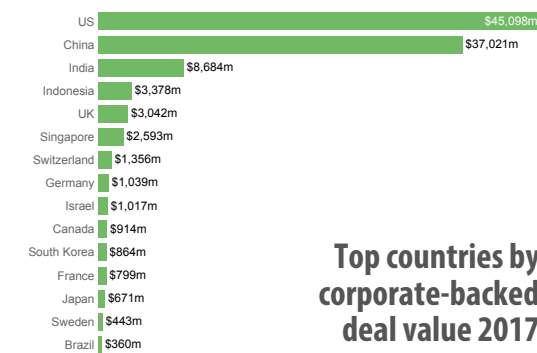
Other corporate-backed initiatives have also been abundant during the past decade. According to data exclusively 



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Top countries by corporate-backed deal volume 2017



Top countries by corporate-backed deal value 2017

Foreign corporate venturers and hubs in Israel

Corporate accelerators

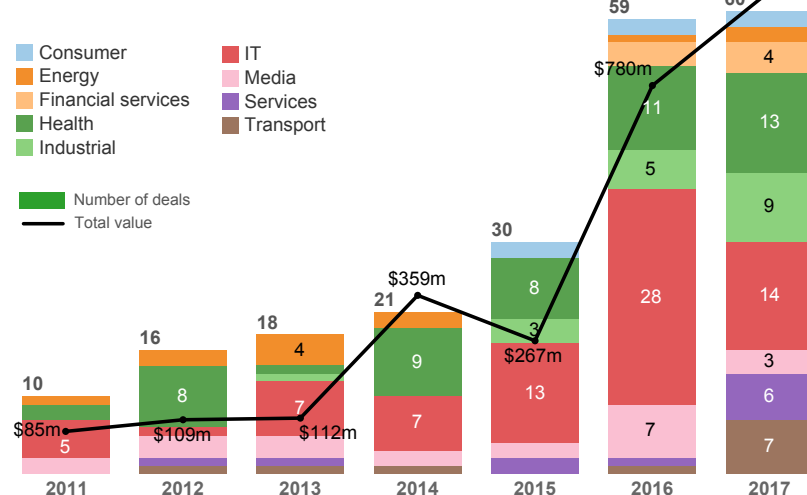
Accelerator	Since
ST-Up Accelerator	2018
Siemens Dynamo	2017
PMatX	2017
Oracle Startup Cloud Accelerator	2016
ENEL Innovation Hub	2016
Predix Startup Accelerator	2015
SAP HANA Accelerator	2015
Johnson Controls Open Innovation	2015
Intel Ingenuity Partner Program	2014
The Bridge by Coca-Cola / Turner / Mercedes-Benz	2014
IBM Alpha Zone	2014
Inno9y	2014
Barclays Accelerator	2013
Orange Fab Israel	2013
Microsoft Accelerator	2011
AT&T Foundry	2011
Citi Accelerator	2008

Corporate venturers

Venturer	Since
Sony Innovation Fund	2016
Next47	2016
Kuang-Chi GCI Fund	2016
Samsung Venture Investment	2015
Intel Capital	2014
Johnson & Johnson Development Corporation	2014
Samsung Catalyst Fund	2013
Dell Technologies Capital	2012
Western Digital Capital	2012
Motorola Solutions Venture Capital	2012
Venture1st	2011
Autodesk Investments	2009
Mangrove Capital Partners	2007
Cisco Investments	1995
GE Ventures	
Merck Ventures	
Qualcomm Ventures	

Source: Start-Up Nation Central

Deal volume and value in Israel 2011-17



released to GCV by Israel-focused non-government organisation Start-Up Nation Central, since 2008, 17 corporate accelerators have been launched, while 26 CVC units were created between 1995 and 2016. Those included the venturing units of household global brands, such as Qualcomm Ventures, Merck Ventures, GE Ventures, Johnson & Johnson Development Corporation (JJDC), Intel Capital, Samsung Catalyst Fund and Sony Innovation Fund.

According to GCV Analytics, in 2017 alone, 10 new corporate-backed funding initiatives arose, including four VC funds, one CVC unit, one accelerator and three incubators. So far in 2018 one VC fund, one CVC unit and one incubator have been launched.

GCV Analytics data shows that in 2017, the top five areas of investment were IT with 14 deals worth a total of \$202m, healthcare with 13 deals worth \$247m, industrials with nine deals worth \$164m, transport with seven deals worth \$155m and services with six deals worth \$85m.

In recent times, Israel has also shone through its achievements in new technology areas such as agtech, water-tech and biotech. Companies such as Waze, Mobileye and Moovit also bear testimony to the country's significant contribution to the automotive industry.

Looking at VC investments at large, the software, life sciences, AI, automotive technology and cybersecurity areas topped the list according to IVC, with \$1.9bn, \$1.2bn, \$1.1bn, \$810m and \$791m respectively committed to each sector last year. The cryptocurrency and blockchain market also gained in popularity, with 10 Israeli high-tech companies having raised \$480m through initial coin offerings.

Between 2011 and 2017, GCV recorded 42 deals closed by Israel-based CVCs domestically and abroad – a relatively small number if one considers the total 222 transactions recorded during that period. Those 42 deals were primarily made in Israel and US-based companies, as reported by GCV.

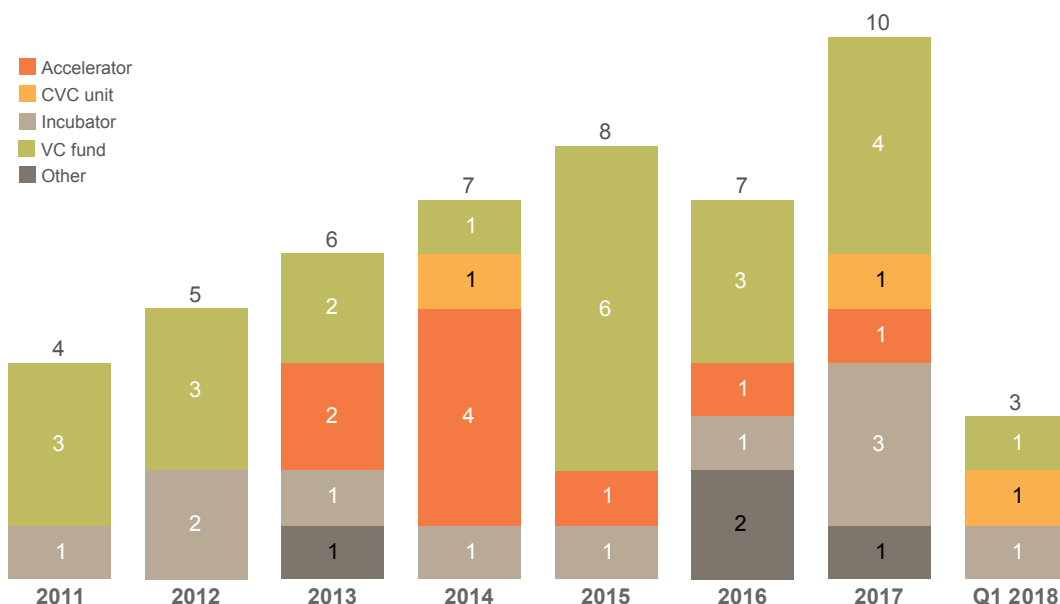
Units that topped the list included BRM Group, which closed 12 deals for a total \$288m, Elron Electronic Industries, which made nine commitments for a total \$76m, Elbit Imaging and Israel Growth Partners with four deals each and \$241m and \$148m committed respectively, and Teva Pharmaceutical Industries, which completed three deals for a total of \$195m.

But the impact that Israeli CVC units have on the



INNOVATIVE REGION

Number of corporate-backed funding initiatives in Israel (2011-18)



local venture market cannot be compared to the major influence exerted by international corporations. It is estimated that around 350 multinational R&D centres are currently based in the country. According to Loew, “almost every major international company now has a development office or R&D centre in Israel”.

The list of Fortune 500 companies with an established presence in the country keeps expanding, while all the global technology giants, such as Google, Intel Capital, Samsung, Microsoft or Hewlett-Packard, set up a local presence some time ago.

According to GCV Analytics, among the top 15 corporate investors in Israel-based companies last year, only two – BRM Group and Elron Electronic Industries – were based in Israel. The rest came mostly from the US or Asia. Qualcomm and Samsung topped the list with 20 and 18 deals respectively, immediately followed by Mitsui, General Electric and Johnson & Johnson, which all closed nine deals over the period.

According to IVC, of the estimated \$5.24bn raised by Israeli startups last year, 84% stemmed from foreign investors, meaning Israeli VCs chipped in a meagre 16%. This substantial gap has existed for a number of years, as Israeli contributions have not exceeded 16% since 2014.

A lot has also been said about the prime place that China has taken as an investor in the country over the past few years. As mentioned in a recent Forbes article, according to IVC, Chinese investments in Israeli startups ranged between \$500m and \$600m a year between 2015 and 2017, representing an average 12% of the total capital raised during those years.

An evident conclusion from all this may be that Israel’s venture ecosystem would certainly not be what it is without the

Top 10 corporate-backed deals in Israel 2011-Q1 2018

Company	Sector	Round	Size	Investors
GetTaxi	Transport	D	\$150m	Access Industries Vostok Nafta
Voyager Labs	IT	–	\$100m	Horizons Ventures Oracle Sir Ronald Cohen
Checkmarx	IT	C	\$84m	Insight Venture Partners Salesforce
Innoviz	Transport	B	\$65m	360 Capital Partners Amity Ventures Delek Motors Delphi Glory Ventures Magma Venture Partners Magna Naver Vertex Ventures Zohar Zisapel
Valens Semiconductor	IT	D	\$60m	Amiti Ventures Aviv Venture Capital Delphi Genesis Partners Goldman Sachs Israel Growth Partners Magma Venture Partners MediaTek Mitsui Pegatron Samsung private investors
StoreDot	Industrial	D	\$60m	Daimler Norma Investments Samsung
Life On Air	Media	C	\$52m	Aleph VC Comcast Greylock Partners Sequoia Capital
Yotpo	Services	D	\$51m	2B Angels Access Industries Bessemer Blumberg Capital Marker Rhodium Vertex Ventures Vintage Investment Partners
Lumus	IT	C	\$45m	HTC Quanta Computer undisclosed strategic investors
Gamida Cell	Health	–	\$40m	Claire Biotechnology Industries Israel Biotech Fund Israel Healthcare Ventures Novartis Shavit Capital VMS Investment Group



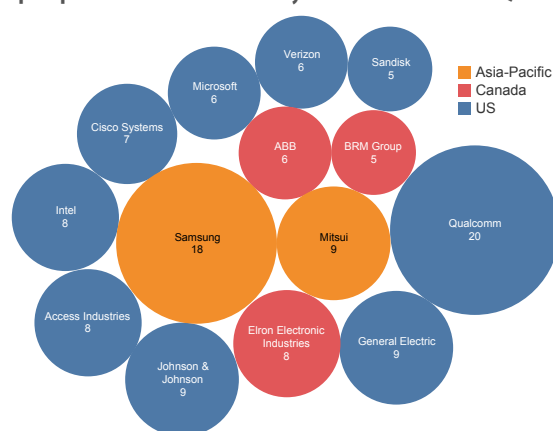
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Israeli startup fundraising, 2013-17



Source: IVC Research Centre

Top corporate investors in Israel by number of deals 2011-Q1 2018



contribution of foreign investors. For Anya Eldan, vice-president of the startup division at the Israel Innovation Authority (IIA), some changes should be encouraged on that front. She said: “One of my goals is to get Israeli corporations to work with startups. Multinationals already know their way through our ecosystem but Israeli companies, surprisingly enough, are much less active.”

This, Eldan suggested, has become one of the IIA’s main tasks.

Government support

It is largely considered that the very first steps of Israel’s venture industry were initiated by the Yozma Group – a government program launched in 1993. Yozma – which in Hebrew signifies “initiative” – started with a single venture fund, Yozma I, which subsequently gave way to Yozma II and III as well as to a number of drop-down funds.

Frequently labelled the “catalyst” of Israel’s VC market, Yozma seemingly helped lay the first foundations of what was to become the world’s second-largest ecosystem after Silicon Valley.

To this day, the Israeli government remains a key supporter, contributing much to the ecosystem’s development. About 4% of the country’s GDP – about \$320bn in 2017 – is invested in the military and in research and development every year.

Government support takes different routes in Israel, including investment programs and public-private initiatives. The Ministry of Defence, the Ministry of Science and the Ministry of Economy are all involved at different levels.

“The Ministry of Economy has programs for funding research at universities, encouraging them to partner with companies, which is a great thing,” said Loev. “The government has shown enough foresight to see the interest there is in funding applied science. Although many of the projects they support do not reach a successful outcome, they do understand that to find a diamond, one has to fund the copper and the lead as well.

“The security needs of our country are also a big determining factor, as the threats we face guide us in deciding which areas to support.”

The largest government supporter in Israel however remains the IIA. Launched in the early 1970s and previously known as the Office of the Chief Scientist, the IIA is an independent public agency responsible for the country’s innovation policy. With an estimated budget of \$1.6bn (around \$446m), the entity describes its role as “nurturing and developing Israeli innovation resources, while creating and strengthening the infrastructure and framework needed to support the entire knowledge industry”.

The institution is currently divided in six divisions, each one of which caters to different needs. These include an advanced manufacturing division, an international collaboration division, a societal challenges division, a growth division focused on R&D funding, a technological infrastructure division, which manages the Kamin, Magnet, Magnetron, Nofar and Meimad programs, and a startup division focusing on technology incubators and early-stage funding, and managing the Tnuva incentive program.

A landmark investment made by the IIA in the past was NeuroDerm, a pharmaceutical company developing treatments for central nervous systems disorders. Founded in one of the IIA’s technological incubators in 2003, it received its support for seven years, eventually leading to a sale to Japanese pharmaceutical group Mitsubishi Tanabe Pharma for an estimated \$1.1bn last year. The transaction was reportedly the largest purchase yet of an Israeli healthcare company.

The IIA also supported the development of Waze, to which it reportedly lent about \$1m for a \$3m return made through the Google sale in 2013.

The IIA’s technological incubators program is one of the agency’s landmark structures. Targeting early-stage con-



INNOVATIVE REGION

cepts often deemed too risky by VCs, the program incubates startups for two years, providing funding of \$500,000 to \$800,000. Around 85% of the funding comes from the government, while the remaining 15% is provided by the incubator's operating company.

To date, the program has funded around 1,500 companies and launched 25 incubators, the majority of which are technology-focused, while a couple of them support the biotech and industrial sectors.

One of the best-known incubators launched by the program is FuturX. Currently the only government-backed biotech incubator, it was established in 2014 as a partnership between the IIA and three CVC units – Johnson & Johnson's corporate venture arm JJDC, Takeda Pharmaceutical's venture unit Takeda Ventures, and biopharmaceutical group OrbiMed's OrbiMed Israel Partners. In light of FuturX's success, the IIA recently announced its intention to launch a second biotech incubator in northern Israel (see *FuturX – an IIA initiative*).

Anya Eldan said even more cooperation should be encouraged between the government and local as well as global corporations. "Corporations have to be much more present in the open innovation and startup scene. At the moment, M&A departments seem to be more active than CVCs in Israel, but I think growth in venture investments will come from corporates in the future."

She added: "But in order to benefit from the entrepreneurial economy, corporates have to engage in much more than just periodic sculpting. The ones that do [such as Takeda, Johnson & Johnson and Merck] participate in our programs and use government money to engage with the ecosystem.

"A lot of multinationals currently engage with us through their venture arm, but I would say the smart ones will be present both through their venture and innovation groups."

Eldan also described the cooperation between the IIA and corporates as a "win-win" that hugely benefits the local ecosystem. "While we know how to solve problems quickly, it can be more difficult to understand business models in their early stages, or issues related to scaling up and building strategic partnerships. That is where large corporations can be really helpful."

University venturing

Israeli universities also play a major part in supporting the ecosystem. The country currently has nine universities, including the prestigious Tel Aviv University (TAU), the Weizmann Institute of Science (WIS) in Rehovot, and the Hebrew University of Jerusalem (HUJ). All of them have tech transfer offices.

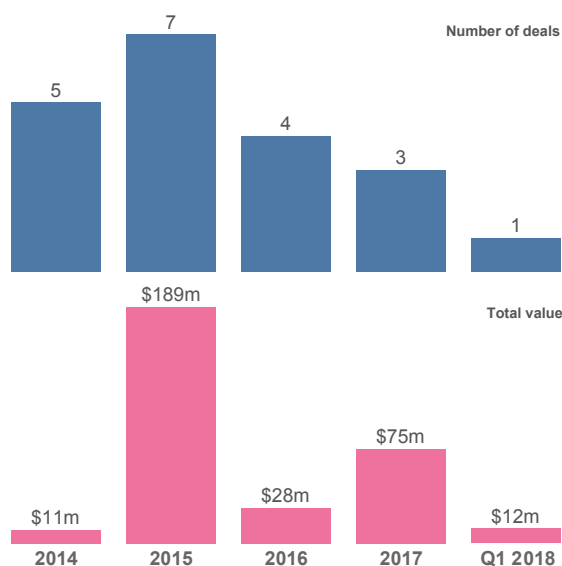
In 2004, the US-Israel Science and Technology Foundation formed the Israel Technology Transfer Organisation (ITTO) – an umbrella organisation for Israel's technology transfer companies, all affiliated to a specific university or research institution. The ITTO currently has 14 partners, including BGN Technologies, affiliated to Ben-Gurion University of the Negev; BioRap Technologies and T3, attached to the Rappaport Research Institute at Technion-Israel Institute of Technology; Birad, associated with the Ramat Gan based Bar-Ilan University; University of Haifa's Carmel-Haifa University Economic Corporation; Yeda Research & Development Company, commercial arm of WIS; and the tech transfer offices Yissum at HUJI and Ramot at TAU.

"I would say the big spur within the university system came around 1995 – that is when it really got off the ground," said Ariel University's Loev. "Although the Israeli government does support local universities through its own funding programs, most of them also apply abroad for funding, through structures such as the National Institutes of Health [an agency of the US Department of Health and Human Services] or Horizon 2020 [a €79bn (\$94bn) European funding program for research and innovation]."

Five binational science foundations also exist between Israel and partner countries to support basic research, including the United States-Israel Binational Science Foundation and similar partnerships with Germany, France and the UK.

According to Loev, the more established universities – among which he includes HUJ, WIS and TAU – give birth to around 12 to 20 new startups a year, while smaller institutes, such as Ariel, produce a couple each year. He added: "The focus on startups is generally very high within universities. All of them have courses focusing on entrepreneurship and

Deals and exits involving university spinouts in Israel 2014-18



INNOVATIVE REGION

Top 10 university-backed deals in Israel 2011-Q1 2018

Company	Affiliated university/institution	Round	Size	Sector	Investors
Chiasma	Ofer Holdings	E	\$70m	Health	7 Med Health Ventures Abingworth Arch Venture Partners F2 Capital MPM Capital Sofinnova Partners Springs Capital
Chiasma	Ofer Holdings	E	\$33.8m	Health	Undisclosed
Eloxx Pharmaceuticals	Technion-Israel Institute of Technology	C	\$30m	Health	DSC Investment Korea Investment Partners OPKO Health Pontifax angel investors
EIMinda	Ben-Gurion University of the Negev	C	\$28m	Health	Healthcrest Palisade Capital Management Wexford Capital WR Hambrecht undisclosed
Integra Holdings	Hebrew University of Jerusalem	-	\$25m	Financial services	Arle Capital Partners Israeli Teachers' and Kindergarten's Study Funds Temasek
Mitoconix Bio	Stanford University	A	\$20m	Health	Arix Bioscience Dementia Discovery Fund OrbiMed Remiges Ventures RMGP Bio-Pharma Investment Fund
Metabomed	Beatson Institute for Cancer Research, Tel Aviv University, University of Maryland, Technion-Israel Institute of Technology	A	\$18m	Health	Arkin Holdings Boehringer Ingelheim Merck Ventures Pfizer Pontifax Technion Research and Development Foundation
Avraham	Hebrew University of Jerusalem	B	\$14.7m	Health	Hebrew University of Jerusalem Pontifax fund Technion Research and Development Foundation
ThetaRay	Yale University	B	\$10m	IT	General Electric Jerusalem Venture Partners Poalim Capital Markets
Unispectral	Tel Aviv University	A	\$7.5m	IT	Jerusalem Venture Partners Robert Bosch Samsung Tel Aviv University

innovation as part of their academic programs. The whole innovation and venture concepts are strongly recognised and acted upon.”

Earlier this year, HUU launched an Israel-based seed-stage incubator in partnership with crowd equity platform Our-Crowd. The incubator, which forms part of the IIA's incubator program, will invest in up to 100 companies over 10 years, focusing on AI, deep learning, autotech and smart cities.

HUU also partnered the Germany-based Fraunhofer Institute for Secure Information Technology (Fraunhofer SIT) at the end of last year to launch Hessian Israeli Partnership Accelerator for Cybersecurity (Hipa). Hipa has selected 16 cybersecurity teams from Israel and Germany to receive three months of training in R&D, entrepreneurship and cybersecurity. HUU and Fraunhofer SIT had already partnered through the Fraunhofer Project Centre for Cybersecurity in 2015.

One significant piece of news that recently made the headlines was the introduction by TAU of its own venture fund, TAU Ventures. The initiative – the first of its kind in Israel – received initial commitments of \$20m from Singaporean investment fund Chartered HighTech, Los Angeles-based investment firm Maxim Capital Group, and several US and Canada-based investors, as reported by GUV.

TAU Ventures, which was reportedly modelled after similar initiatives at US universities, including the Massachusetts Institute of Technology, University of California Berkeley and Stanford University, should be running for seven years. It will operate a variety of incubation programs in collaboration with strategic partners, the first of which will be the Japanese IT services and products provider NEC Corporation. It will invest in startups set up by university graduates or students operating within various technology fields, avoiding sectors requiring longer-term commitments such as biotech or cleantech, TAU announced.

Perfect picture?

In many ways, the Israeli venture and innovation ecosystem seems to form a perfectly running and well-fuelled machine, where all the necessary organs and actors – corporates, government and universities – are in place and contribute.

But could Israel eventually become the victim of its own success? In a recent interview with Index Ventures, Ron Gura, who runs e-commerce platform eBay's innovation centre in Tel Aviv, warned of the risks of having a hyperactive ecosystem such as Israel's. “There are hidden dangers in the glittering success, such as the way the ecosystem feeds off itself, breeding exit-focused entrepreneurs and an M&A culture.

“The fact that there is more VC money in Israel, second only to Silicon Valley, not just per capita, but in absolute numbers, that alone explains why you see so many startups here, because there is demand on both sides.

“I would argue that that is not necessarily a good thing. We have so many people opening businesses, that maybe we have crossed a line and now there are too many. Exits, in themselves, should never be the goal, and in my short experience, I do not know anyone yet who had a successful exit when that was their goal in the first place.”

A shared feeling among local VCs is also that the abundance of new businesses may exacerbate human resources



INNOVATIVE REGION

issues. A source told GCV: “Until about three or four years ago, there were two major bottlenecks in Israel – one was funding and the inability to get significant rounds, and the second was the lack of good experienced managers. Over the past three years, however, the funding gap has been progressively closed, although to an extent, we do still lack very large funding rounds, leaving the management issue to become the most prominent one.”

This, according to sector players, is particularly the case for biotech, where there is a shortage of quality C-level managers such as chief scientific officers, chief technology officers and heads of R&D. Another source said: “Because of the abundance of innovation here, and the important number of companies, there is a very fierce competition to get good managers. Although the innovation coming out of universities and research centres is of a very high quality, we still need people with a lot of experience to make good products out of it. We tend to have more innovation here than our managers can handle, and that is an issue.”

Ariel University’s Loev, meanwhile, identified another aspect that could be improved. He said: “One thing we could definitely work on is streamlining bureaucracy, which at industry level means minimising reporting constraints and reducing the approvals necessary for starting companies, which is still pretty convoluted.”

Conscious of the geopolitical tensions affecting Israel and the surrounding territories, Loev also said innovation could be used as a tool to encourage more integration in the region. He added: “More needs to be done to bring other social sectors of Israeli citizens and ethnic minorities – including the orthodox and Arab communities – into the high-tech and innovation fast-track, which in turn, would facilitate integration.”

Although there are few signs that Israel’s “success story” in the world of startups will soon come to an end, political tensions and military conflict could modify the picture very quickly. ♦

FuturX – an initiative aiming to retain innovation

Founded in January 2014, FuturX is the result of a partnership involving three corporate players and the Israeli Innovation Authority (IAA). With a provisional lifespan of eight years, the biotech incubator awards an average \$2.3m to selected startups, covering three years of R&D activities. Startups can get additional funding of up to \$500,000 through a separate dedicated biopharmaceutical fund.

Esther Lukasiewicz Hagai, CEO at FuturX, said: “We take projects at an early stage, based on scientific research sourced from academia, and aim to bring them within three years to an inflection point that will help them raise more funding in the future, making sure that they can continue their development activities after they graduate from the incubator.”

To date, FuturX has incepted 11 companies based on university research from Israel and abroad. According to Hagai, two of its biggest successes are BiomX, sourced from the Weizmann Institute of Science and developing bacteriophage-based therapeutics to treat cancer and chronic diseases, and Mitoconix, a Stanford University spinout aiming to treat neurodegenerative diseases. Both groups succeeded in raising money from VCs during their first year in the incubator, with the former hitting \$27m for its series A and the latter \$20m.

“For us, this is a confirmation that the technologies we choose to support, even if selected at an early stage, are very promising, and that their field of application is of interest,” said Hagai.

She added: “Having our three founding partners [JJDC, Takeda and OrbiMed] as part of the incubator is a big advantage, as they provide us with a lot of insight into the industry, and with useful guidance and mentoring on our many activities, making sure we are going in the right direction. It is interesting for them in turn because it gives them access to early-stage cutting-edge projects, which they can afford to wait and see develop while we nurture them. It is a different way for them to look at the ecosystem.”

One of FuturX’s main goals, according to Hagai, is to promote innovation in Israel and build out the biotech ecosystem. “By funding these early-stage projects that large VCs or biopharmaceutical companies would usually not be interested in, what we try to do is keep technologies and innovation in Israel rather than selling them to foreign groups.

“The whole concept of the incubator is really down to creating value in Israel and making all the efforts we can to keep our companies here, or at least their R&D units. The companies we incubate usually develop very specific knowledge in very specific fields, which means they are not always easy to export. We would really like to see them grow here, and stay.”

Although the situation is constantly improving, there are still gaps that need to be bridged in certain fields, according to the CEO. “This is for instance the case for bioanalytics or medicinal chemistry,” she said. “Having more facilities and experts in those fields in Israel would be a great progress, and something the sector would greatly benefit from.” ♦



UNIVERSITY CORNER

GUV Awards 2018 nominees

Global University Venturing is excited to present the shortlist for this year's GUV Awards. The selection proved particularly difficult this year and we congratulate all who have been nominated. The winners will be revealed at the gala dinner on May 22 as part of our GUV:Fusion conference, run jointly with the GCV Symposium, in London. We will also feature in-depth articles about each winner in next month's magazine – printed copies will be available at GUV:Fusion.

Tickets to both the conference and the gala dinner are available at a promotional rate until May 11, with university staff receiving a discount on conference entry – book at gcvsymposium.com.

Tech Transfer Unit of the Year

Indiana University Research and Technology Corp (Indiana University)
 Johns Hopkins Technology Ventures (Johns Hopkins University)
 Office for Technology Commercialisation (University of Minnesota)
 Oxford University Innovation (University of Oxford)
 Yissum (Hebrew University of Jerusalem)

Personality of the Year

Alan Aubrey, IP Group
 James Wilkie, University of Birmingham Enterprise
 Jill Smith, Allied Minds
 Rafi Hofstein, Mars Innovation
 Simon Bond, SetSquared

Fundraising of the Year

Bluefield Innovations (Johns Hopkins University)
 Highlander Venture Fund (University of California Riverside)
 Pittsburgh Revolution Fund (University of Pittsburgh)
 TMC Venture Fund (Texas Medical Centre)
 University of Tokyo Edge Capital (University of Tokyo)

Investment Unit of the Year

Allied Minds
 Aurora-TT
 Cambridge Innovation Capital
 IP Group
 Osage University Partners

Deal of the Year

CureVac (Eberhard Karls University of Tübingen)
 Darktrace (University of Cambridge)
 Inozyme (Yale University)
 Orchard Therapeutics (University College London)
 TTTech (Vienna University of Technology)

Technology of the Year

Numaferm (Heinrich Heine University Düsseldorf)
 Palleon Pharmaceuticals (Stanford University, University of Dundee)
 Pollinator Orchard Management (Royal College of Art)
 Repare Therapeutics (Lunenfeld-Tanenbaum Research Institute, University of Toronto and New York University)
 VirionHealth (University of Warwick)

Exit of the Year

Green Lord Motors (Kyoto University)
 Innoetics (Institute of Language and Speech Processing at Athena Research Centre)
 Nightstar Therapeutics (University of Oxford)
 PowerbyProxi (University of Auckland)
 Rigontec (University of Bonn)

Lifetime Achievement Award

This award is in recognition of a person whose career and dedication to technology transfer have had a profound impact on the sector. The recipient will be disclosed on the night. ♦



GOVERNMENT HOUSE

Dawn closes \$232m fund with EIF support

Chris Torney, reporter

Dawn Capital, a UK-based early-stage technology investor, has closed a £165m (\$232m) fund with backing from the EU-run European Investment Fund (EIF), TechCrunch has reported.

The Dawn III fund has been given \$74m by the EIF, a move that signals the EU will continue to support UK-based investors provided they offer finance to European businesses. Dawn's portfolio is equally split between UK and other European companies.

Dawn III was also supported by the British Business Bank through its British Business Investments arm.

The EIF's support for Dawn has surprised many observers given that UK venture capitalists believed the EIF had effectively stopped financing the country's VC funds as part of the Brexit process. Last year, the EIF said it had started to take a more considered approach to supporting UK companies and funds.

According to a report published by the Financial Times today, the European Investment Bank – which owns a stake in the EIF through a public-private partnership – had reduced its funding of UK enterprises by two-thirds between 2016 and 2017. Last year only 8% of its investments were UK-focused, down from 27% in the previous 12-month period.

An EIB document seen by the Financial Times stated that, while the bank has not formally cut off the supply of funding to the UK, the drop was a result of the increased complexity of concluding deals that was inevitable after the Brexit referendum.

However, news of the Dawn III deal does suggest the EIF will to some extent remain open for business – at least until the Brexit process is completed – provided funds have some form of European focus. ♦



MONTHLY ANALYSIS

This is our data snapshot based on last month's investment activity. The charts and tables have been generated by our data platform GCV Analytics.

Deals and value up in April

Kaloyan Andonov, reporter, GCV Analytics



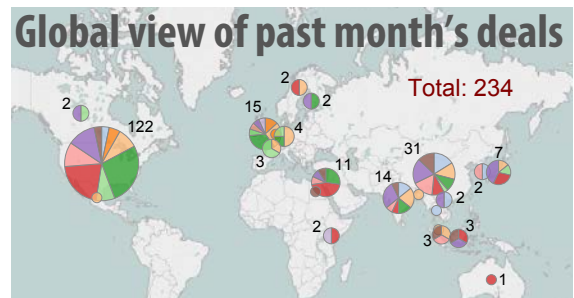
The number of corporate-backed deals we reported from around the globe in April stood at 234, up 48% from the 158 funding rounds in the same month last year. Investment value also increased considerably, by 30%, to \$14.24bn – up from \$10.97bn in April 2017.

April registered somewhat weaker results than March this year with its 270 rounds, but still outperformed January and February in terms of deal count. However, total capital invested was higher than the \$12.27bn estimated for March or than any other month so far this year.

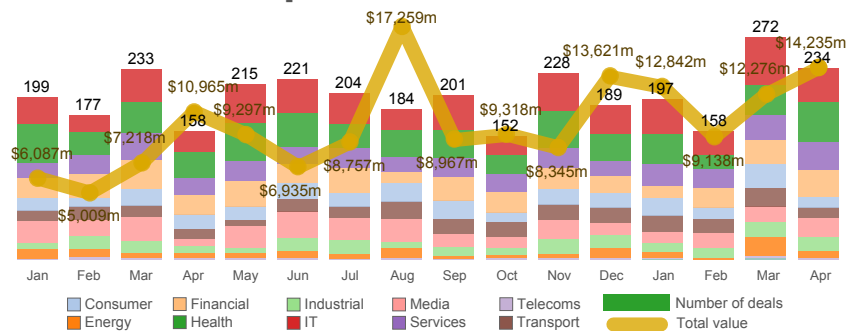
The US came first in the number of corporate-backed deals, hosting 122 rounds, while China was second with 31, the UK third with 15 and India fourth with 14.

The leading corporate investors by number of deals were internet company Tencent, e-commerce firm Alibaba and telecoms firm SoftBank. In terms of involvement in the largest deals, Tencent and SoftBank topped the ranking, along with diversified internet and technology conglomerate Alphabet.

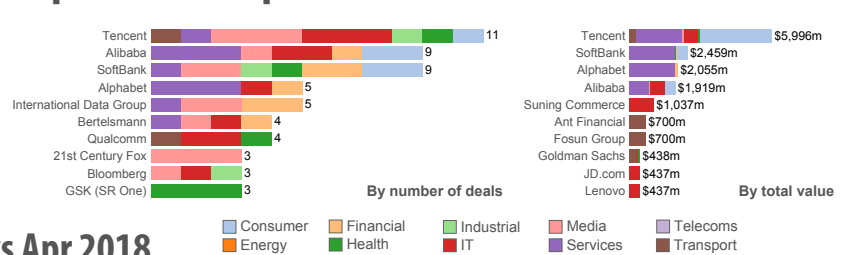
GCV Analytics reported



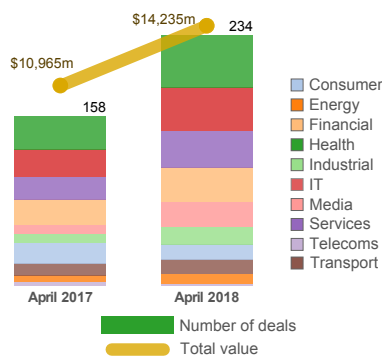
Deals Jan 2017-Apr 2018



Top investors Apr 2018



Deals Apr 2017 vs Apr 2018



16 corporate-backed funding initiatives in April, including VC funds, new venturing units, incubators and accelerators. This figure is lower than that of March, which registered 21 such initiatives. The estimated capital raised in those initiatives was \$2.39bn, up from the estimated \$1.82m in the previous month.

Deals

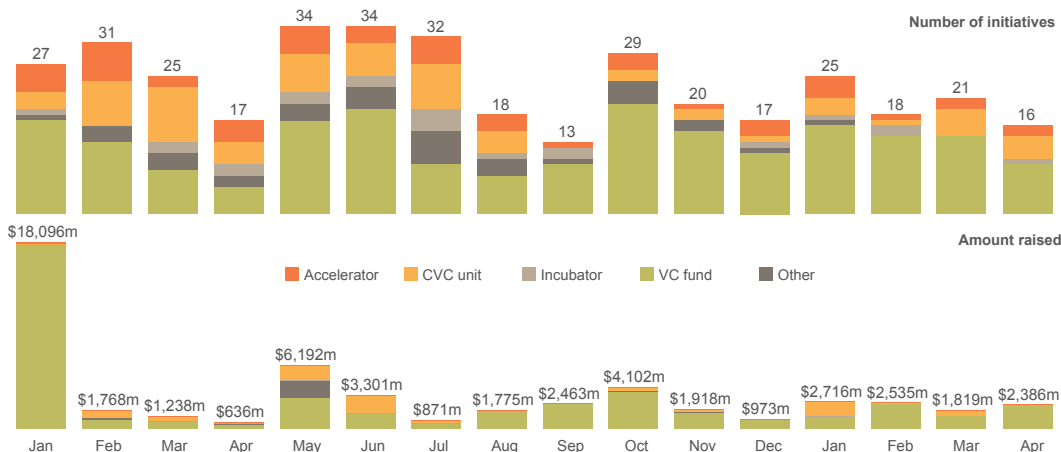
Emerging businesses from the health, IT, services and financial sectors raised the largest number of rounds during April. The most active corporate venturers came from the financial services, IT, industrial and media sectors, as shown on the heatmap overleaf.

China-based online group buying platform Pinduoduo closed a \$3bn



MONTHLY ANALYSIS

Funding initiatives by month Jan 2017-Apr 2018



funding round led by Tencent. Venture capital firm Sequoia Capital reportedly also participated in the round, which valued Pinduoduo at \$15bn. Founded in 2015, Pinduoduo operates an e-commerce offering in which users utilise social media platforms, such as messaging service WeChat, to share details of products, and to form purchasing groups to secure discounts.

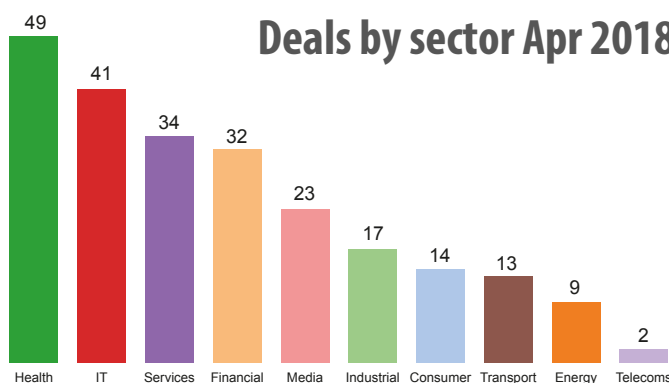
China-based trucking services marketplace Manbang Group raised \$1.9bn in a round featuring Tencent and subsidiaries of Alphabet and SoftBank. The round valued the company at \$6.5bn. Alphabet's investment came through its CapitalG unit, while SoftBank took part through the SoftBank Vision Fund. Formed in 2017 and previously known as Full Truck Alliance Group, Manbang manages an online platform where those looking to ship goods can link with truckers with surplus space in their vehicles. It was formed by the merger of rivals Huochebang and Yunmanman.

Alibaba made a RMB4.5bn (\$717m) investment in Huitongda Network, a spinoff from China-based retail chain Jiangsu Five Star Appliances. Founded in 2010, Huitongda provides e-commerce and marketing services to a network of about 80,000 rural bricks-and-mortar retailers in 15,000 Chinese towns. Through it, local retailers sell items to a wider market, while online merchants can access rural customers more directly.

China-based bicycle rental service Hellobike secured approximately \$700m in series E1 funding from investors including conglomerate Fosun and Ant Financial, the financial services affiliate of Alibaba. The corporates were joined by seven unnamed investors. The funding is the first tranche of the company's series E round and it is in the process of raising the rest. Electric vehicle developer WM Motor is also expected to take part in the round. Hellobike is China's third-largest app-based bike-sharing service by monthly active users, after Mobike and Ofo. It has 100 million registered users and a presence in 180 Chinese cities.

Alibaba led a \$600m series C round for China-based artificial intelligence (AI) software provider SenseTime, which val-

Deals by sector Apr 2018



Deals heatmap Apr 2018

	Financial services	IT	Industrial	Media	Health	Consumer	Services	Telecoms	Transport
North America	41	26	21	17	22	8	11	4	5
Asia	21	17	6	11	2	14	8	8	3
Europe	7	3	5	2	6	1	2	1	2
Middle East	2	3	2	2	1		2	2	
Africa								2	
Australia / NZ								1	



MONTHLY ANALYSIS

Top 10 investments Apr 2018

Company	Location	Sector	Round	Size	Investors
Pinduoduo	China	Consumer	–	\$3bn	Sequoia Capital Tencent
Manbang Group	China	Services	–	\$1.9bn	Alphabet China Reform Holding GSR Ventures Sequoia Capital SoftBank Tencent Ward Ferry
Huitongda	China	Services	–	\$717m	Alibaba
Hellobike	China	Transport	E and beyond	\$700m	Ant Financial Fosun Group undisclosed investors
SenseTime	China	IT	C	\$600m	Alibaba Suning Commerce Temasek
Paytm Mall	India	Consumer	–	\$445m	Alibaba SoftBank
New Leshi Smart Home	China	IT	–	\$437m	Evergrande Group JD.com Lenovo Sunac China Holdings Suning Commerce TCL Group Tencent
Renrenche	China	Transport	–	\$300m	Didi Chuxing Goldman Sachs Tencent
Allogene Therapeutics	US	Health	A	\$300m	BellCo Capital Pfizer TPG University of California Vida Ventures
Alisports	China	Media	A	\$290m	China Taiping Insurance Yunfeng Capital

ued it at \$4.5bn. Retail group Suning and Singaporean government-owned investment firm Temasek also participated in the round, which the company claims is the largest raised by an AI technology developer. Founded in 2014, SenseTime supplies computer vision and deep learning technology based on its supercomputing platform, powering functions such as facial and textual character recognition, video analysis and autonomous driving software.

India-based online retailer Paytm Mall raised \$445m in a round led by SoftBank, which committed \$400m. Alibaba supplied an additional \$45m, valuing Paytm Mall at approximately \$1.9bn. The capital will be supplied in four tranches and will give SoftBank a 21.1% stake, with Alibaba's stake dropping from 36.3% to just over 30%. Launched by mobile payment platform Paytm in 2016, Paytm Mall has since been restructured into a separate business by One97 Communications, the e-commerce and online services group that owns Paytm.

New Leshi Smart Home, an affiliate of China-based consumer electronics producer LeEco, raised RMB3bn from investors including several corporates. Real estate developer Sunac China, Tencent, retailer Suning and e-commerce firm JD.com provided about \$318m of the funding, with the rest reportedly coming from convertible note financing. Formerly known as Leshi Zhixin Electronic Technology, New Leshi Smart Home produces smart internet-connected televisions under the brand name LeTV Super TV.

Renrenche, a China-based operator of an online marketplace for used vehicles, received \$300m from investors including ride-hailing service Didi Chuxing. Tencent was also reported as seeking to back the round, led by investment banking firm Goldman Sachs. Founded in 2014, Renrenche operates an e-commerce platform for second-hand cars that is active in more than 80 Chinese cities. The company is also looking to develop financing services later this year and plans to explore opportunities in the after-sales market in partnership with Didi.

US-based immuno-oncology drug developer Allogene Therapeutics was launched with \$300m in series A financing from investors including pharmaceutical firm Pfizer, which also provided assets for the startup. The round was also backed by University of California's Office of the Chief Investment Officer of the Regents, among other investors. Allogene was founded to develop 16 preclinical assets and one clinical asset licensed by Pfizer from biopharmaceutical developers Collectis and Servier for an oncological approach called allogenic Car-T therapy, which uses cells from healthy donors rather than relying on a patient's own DNA. It is expected to reduce waiting times for cancer treatment.

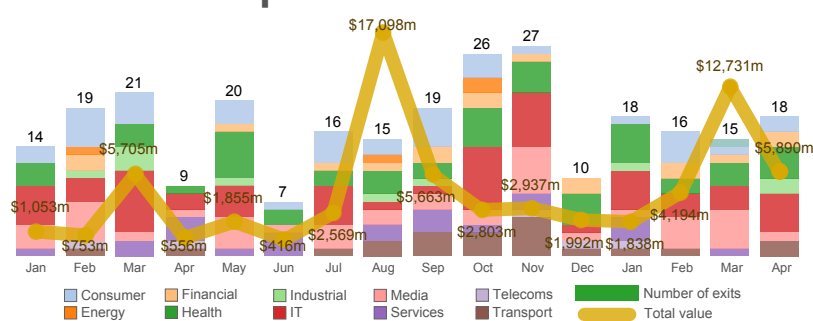
Alisports, the sports affiliate of Alibaba, raised RMB1.2bn in series A funding from investors including insurance firm China Taiping Insurance. The round was led by Yunfeng Capital, an investment firm co-founded by Alibaba's executive chairman Jack Ma. The transaction valued the company at \$1.3bn. Founded in 2015, Alisports operates a professional sports platform that integrates services such as e-commerce, media, marketing, cloud computing and video and targets areas such as ticketing, events management and copyright.

Exits

In April, GCV Analytics tracked 18 exits involving corporate venturers as either acquirers or exiting investors. The transactions included 11 acquisitions and seven initial public offerings (IPOs).

The number of exits increased slightly over March, when there were 15. Total estimated exited capital, however,

Exits Jan 2017-Apr 2018



MONTHLY ANALYSIS

amounted to \$5.89bn, a drop from the previous month, which included the \$9.8bn stake sale of Tencent by South Africa-based media group Naspers.

Local services platform Meituan-Dianping agreed to buy China-based bike rental service Mobike for \$2.7bn. The transaction was reportedly 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 2018 when it launched a service in Paris.

US-based collaboration and data storage platform Dropbox went public in a \$756m IPO on the Nasdaq Global Select Market. The company issued 36 million shares at \$21 each, giving it a total market capitalisation of \$8.22bn. Dropbox had reportedly upped its price range from \$16 to \$18 a share, to \$18 to \$20. It was revealed that Salesforce had acquired 4.76m additional shares by investing \$100m via a private placement. Founded in 2007, Dropbox has developed a cloud-based storage and sharing platform with more than 500 million users, 200,000 of which are businesses and 11 million of which are paying subscribers.

Pivotal Software, a US-based software development services provider spun out of software producer EMC, closed its IPO at just over \$638m, after underwriters bought 5.5 million additional shares. The IPO initially consisted of 33.1 million shares at \$15 each, in addition to almost 3.9 million shares sold by industrial technology and appliance manufacturer General Electric. Spun out of EMC, Pivotal supplies software development technology as well as expertise to clients looking to create customised applications.

US-based digital signature technology provider DocuSign floated in a \$629m IPO, in which Alphabet and mass media group Comcast exited. The shares were priced at \$29, above the \$24 to \$26 range the company had set, giving DocuSign a market capitalisation of over \$4.4bn. The company issued just over 16 million shares on the Nasdaq Global Select Market, raising almost \$466m, while shareholders sold almost \$164m of shares in the offering. DocuSign has developed an e-signature platform it claims has hundreds of millions of users, including some 370,000 businesses.

Weebly, a US-based website creation platform backed by Tencent, agreed to an acquisition by payment processing firm Square for approximately \$365m. Square is paying a mix of cash and shares, including restricted stock units for Weebly's founders and employees that will vest over four years. Founded in 2007, Weebly operates an online platform for building and hosting websites and e-commerce stores. Square will integrate Weebly's offering into its suite of products.

Top 10 exits Apr 2018

Company	Location	Sector	Type	Acquirer	Size	Exiting investors
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 Qiming Venture Partners Sequoia Capital Temasek Tencent TPG Warburg Pincus private investors
Dropbox	US	IT	IPO		\$869m	Accel Partners angel investors Baillie Gifford Benchmark BlackRock Fidelity Foundation Capital G Squared Goldman Sachs Kaiser Permanente Mark Cuban Mass Mutual Salesforce Wellington Partners Y Combinator
Pivotal	US	IT	IPO		\$638m	Dell Ford Motor General Electric Silver Lake VMware
DocuSign	US	IT	IPO		\$629m	Accel Partners Alphabet Bain Capital BBVA Brookside Capital ClearBridge Investments Comcast Cross Creek Advisors Dell Deutsche Telekom EDBI Frazier Technology Ventures Generation Investment Management Ignition Partners Intel Kleiner Perkins Caufield & Byers Mitsui NTT Docomo Recruit Holdings Salesforce Samsung Sands Capital SAP [Sapphire Ventures] Scale Venture Partners Second Century Ventures Sigma Partners Telstra Visa Wasatch Advisors Wellington Management WestRiver Capital
Weebly	US	IT	Acquisition	Square	\$365m	Baseline Ventures Felicis Ventures Maples Investments Sequoia Capital Tencent
Homology Medicines	US	Health	IPO		\$166m	5AM Ventures Alexandria Arch Venture Partners Deerfield Management Fidelity HBM Healthcare Investments Maverick Ventures Novartis Rock Springs Capital Temasek Vida Ventures Vivo Capital
Surface Oncology	US	Health	IPO		\$108m	Amgen Atlas Venture Eli Lilly Fidelity New Enterprise Associates Novartis private investors
Secdo	Israel	IT	Acquisition	Palo Alto Networks	\$100m	Rafael Development Corporation private investors
Clarity Money	US	Financial services	Acquisition	Goldman Sachs	\$100m	Bessemer Citi Maveron RRE Ventures Soros Fund Management
NLight Photonics	Canada	Industrial	IPO		\$96m	Greenover Group Menlo Ventures Mohr Davidow Ventures Oak Investment Partners Samsung Wellington Management



MONTHLY ANALYSIS

Homology Medicines, a US-based rare disease treatment developer backed by pharmaceutical firm Novartis, raised \$165.6m in an IPO on the Nasdaq Global Select Market. The company, which had originally targeted \$100m in proceeds, priced its shares at \$16, offering a total of 9 million. They traded at \$16.49 at close, giving Homology a market cap of about \$627.9m. Founded in 2015, the company is working on gene therapies that target the underlying causes of rare diseases.

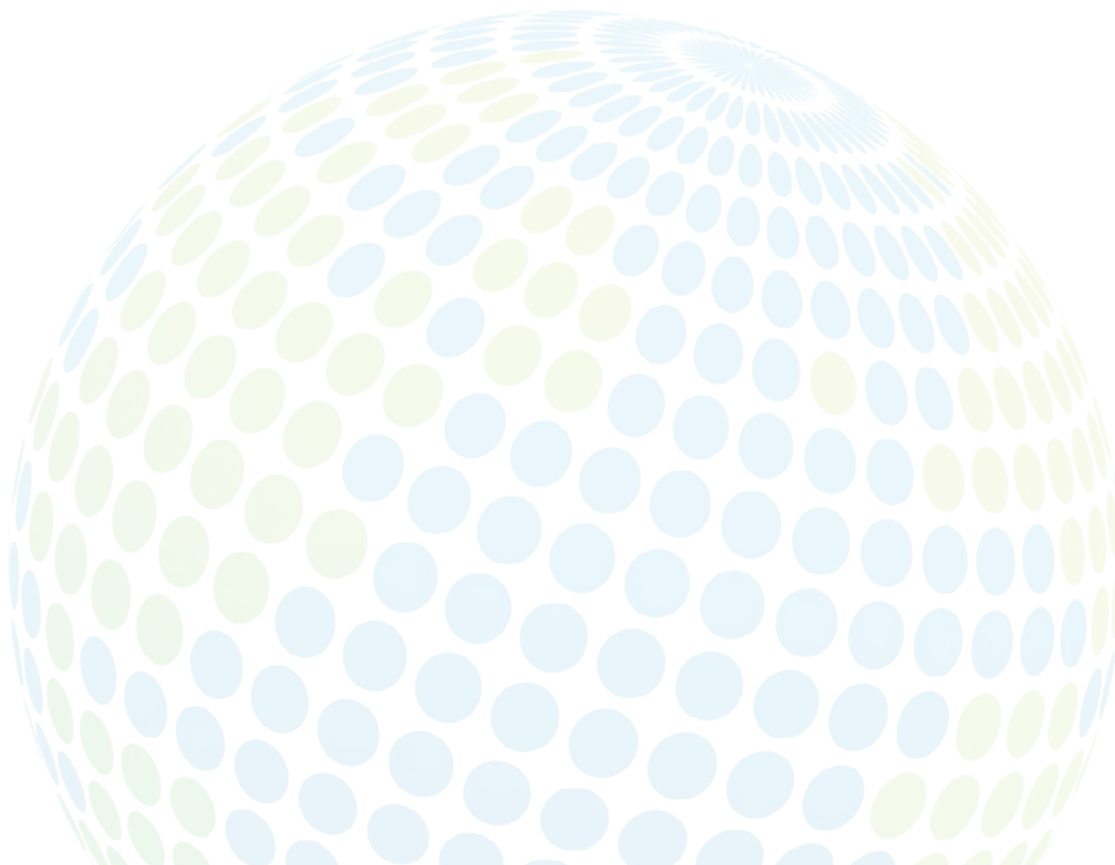
Surface Oncology, a cancer drug developer with pharmaceutical companies Eli Lilly, Amgen and Novartis as investors, raised \$108m in its IPO. The offering consisted of 7.2 million shares priced at the top of its \$13 to \$15 range. Novartis Institutes for Biomedical Research, a subsidiary of Novartis, invested another \$11.5m in the company through a concurrent private placement. Surface Oncology develops immuno-oncology therapies focusing on the biological pathways important to immunosuppression.

Network security software producer Palo Alto Networks agreed to acquire Secdo, an Israel-based cybersecurity technology provider backed by corporate joint venture Rafael Development Corporation. Palo Alto agreed to pay about \$100m. Founded in 2014, Secdo has built a software platform that detects cyber-threats and identifies how a device has been compromised, providing IT staff with granular tools to respond to attacks without impacting users.

Goldman Sachs Bank USA, a subsidiary of investment banking group Goldman Sachs, acquired Clarity Money for a reported \$100m, allowing financial services firm Citi to exit. Launched in 2017, Clarity has developed a mobile app with more than 1 million registered users that uses artificial intelligence, machine learning and data science to manage personal finances. It helps users track their spending, identifies potentially unwanted subscriptions for cancellation, and recommends additional personal finance products.

US-based laser technology developer NLight raised \$96m in IPO that scored an exit for Samsung Ventures, a corporate venturing subsidiary of the electronics producer. The offering consisted of 6 million shares at \$16 each, above its \$13 to \$15 range. The company's stock opened at \$23 on the Nasdaq Global Market and closed at \$25.01, giving it a market capitalisation of just over \$840m. Founded in 2000, NLight supplies semiconductor and fibre lasers for use in manufacturing processes for the industrial, microfabrication, aerospace and defence industries. ◆

Note: Monthly data can fluctuate as additional data are reported after GCV goes to press



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



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



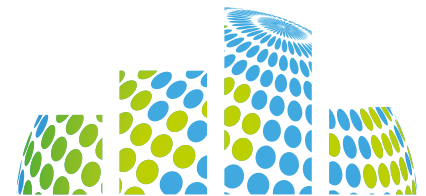
Zhang is a consultant and had a meeting scheduled with a CVC. Needing to do a quick bit of background research he popped into GCV Analytics. He walked into the meeting knowing what deals they had done and who they had co-invested with and was also able to tell them what the competition had been doing.



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

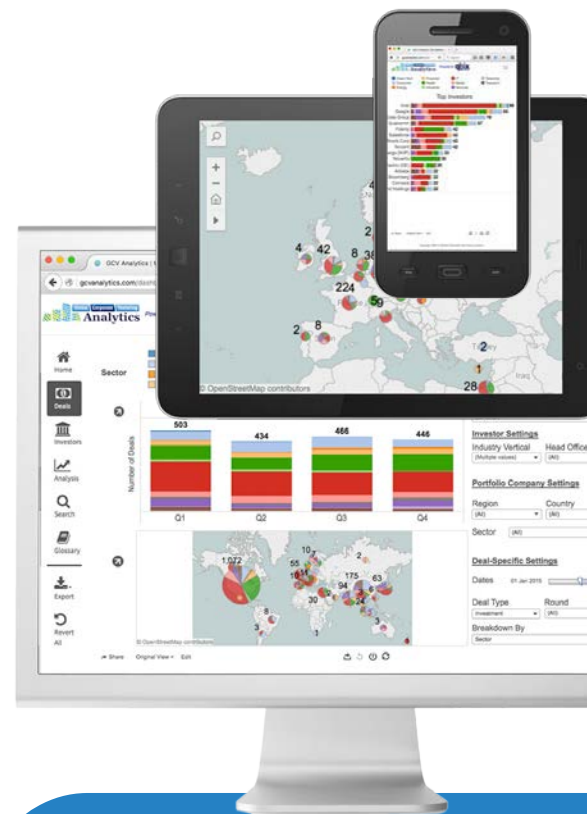
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