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Engineering imagination



Focus on industrials

News round-up from www.globalcorporateventuring.com

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Global Corporate Venturing

Address:

3-4 Doughty Street,
London WC1N 2PN

Website: www.globalcorporateventuring.com

Editorial:

Editor: James Mawson

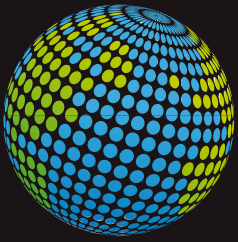
Tel: +44 (0) 7971 655590

Email: jmawson@globalcorporateventuring.com

Research Editor: Jo Foster

Production Editor: Keith Baldock

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Contact: James Mawson

Tel: +44 (0) 7971 655590 Email: jmawson@globalcorporateventuring.com



The challenge of working laterally across sectors

There is an interconnectedness in modern industry and society. People working in an area often have to grapple both with changes unique to their sector through refining and improving products, or meeting unmet needs but also indirect shifts, such as the internet and mobile communications, that affect multiple industries.

Larry Keeley, president of consultancy firm Doblin, part of the influential Monitor Group, in a thoughtful speech at the excellent IBF Corporate Venturing and Innovation Partnering conference* last month said there was an “interconnectiveness or porousness of modern industry”.

This sense of movement is right but lucidity comes only when things are still.

In an interview with the Financial Times last month, Paul Rudd, former prime minister of Australia, evocatively described being at the April 2009 Group of 20 summit during the nadir of the credit crisis. Rudd tells FT Asia managing editor David Pilling: “There we were, all dog-tired, all flown in from wherever and knowing that unless we came out with a coherent set of actions ... the markets would collapse.” This, evidently, is not how things should be done, Pilling writes ([click here to read the FT article](#)).

In the business world, corporate venturers should be in the perfect position to help their chief executives prepare their own coherent answers to testing times as their role calls for a strong awareness and alignment with the strategic and tactical needs of the sponsor as well as keeping close to the market and competitive shifts taking place.

Too often, however, the demands on time plus information-overload mean corporate venturing only rarely achieves the tranquility required for lucid thought.

At the IBF conference, while the overall atmosphere was positive and a host of new units have been set up ([see news pages 11-16](#)), a succession of senior managers bemoaned the lack of resources and compromises made to start with.

One said: “The plan to set up the venturing unit called for a number of offices round the world and for a team able to look across different sectors. Instead, the resources mean we have an office here [in the US] and spend our time dealing with our industry.”

These are the issues of dealing with global innovation and competition and the challenges and opportunities crossing sector boundaries that will dominate the inau-



James
Mawson,
editor

gural Global Corporate Venturing symposium and best practices event on May 18. The event is being run with this publisher's strategic partner, consultancy firm Frost & Sullivan, which is hosting its Growth, Innovation and Leadership forum and awards on May 17 and 18, also at the Emirates Stadium in London – email me for more information ([see advertisement, page 5](#)).

However, given a history of overambitious launches, it is understandable a unit should have to prove itself over years or decades before it can expand to the size and sophistication of Intel Capital, Novartis or General Electric, the most influential corporate venturing unit in the industrial sector ([see table, page 26](#)).

The sector is one of the most interesting because of its sophistication in pulling together a cohesive package of innovation techniques, including competitions, licensing, partnering, corporate venturing and incubation. Almost any of the top 20 industrial companies in the Global Corporate Venturing ranking could be the most influential in perhaps any other sector. Industrial companies have proved over years and decades how to invest in innovation and work globally in ways companies from other sectors struggle to replicate.

The list is diverse regionally, too, as the first and second generation of managers that built challengers to the developed world's dominant manufacturers are starting to lay the groundwork for the evolution or revolution required to maintain their place and explore the opportunities in other sectors. ■

* Editor's note: Global Corporate Venturing was on the IBF's advisory board.



Global

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**in collaboration with
Frost & Sullivan, London Business School and H-I Network presents**

“Corporations venture into a world of innovation”



**May 17-18, 2011, Emirates stadium
(home to Arsenal Football Club) London, UK**

**In conjunction with
Global Corporate Venturing Best Practices and Awards
on May 18**

Business leaders, corporate venturing executives and others within the global ecosystem, such as venture capitalists and entrepreneurs, talk about corporate venturing and its opportunities over the next few years.

The seminar will be part of leading consultancy firm Frost & Sullivan's Growth, Innovation and Leadership forum. The afternoon of May 17 will deal with industry trends, and the following morning will feature innovation-themed panels, with an afternoon symposium on corporate venturing.

In the evening is a black tie banquet and awards ceremony – a gala event to celebrate the corporate venturing industry's achievements over the past year.

**To attend or sponsor this event please contact James Mawson:
+44 (0)7971 655590; jmawson@globalcorporateventuring.com**

Whose responsibility is it?

When speaking with the sales director of a big company recently, I was a little surprised when he said: "Innovation is not my responsibility." It was quite a telling remark and hinted at a bigger question about whose responsibility innovation should really be.

"Not all the smart people work for you," according to Bill Joy, founder of Sun Microsystems, so how can a company tap into great ideas or great people wherever they may be and whose responsibility is it to engage them and innovate with them?

However, the responsibility for innovation is shifting rapidly which means you have to compulsively connect, act very differently and begin trading collaboration currencies.

Compulsively connect

Innovation seldom results from a top-down, strategic initiative. It is much more likely to spread virally from team to team, one conversation at a time. Therefore, while you need buy-in from the top, the worst thing you can do is lump responsibility for innovation solely in research and development (R&D) or marketing departments and expect them to innovate in isolation.

The best innovation strategies are the ones that have buy-in and engagement from right across the business, from human resources to brand management and public relations, marketing, product development, mergers and acquisitions, customer service and logistics.

This is because innovation is increasingly a contact sport. External partners will not see, or be very interested, in your internal structures, but will see and follow you as a person or a brand and what it represents.

We all like to work with people and organisations who are straightforward and likeable and so there will be ever-increasing demands for a simpler ways to engage with you. Therefore, for innovation to thrive, it is crucial that everybody takes responsibility for compulsively connecting people and ideas both internally and externally.

Act your way into a new way of thinking

Everybody wants innovation but nobody seems to quite agree what it is. For example, we recently asked people at a client workshop, and also on Twitter, to name their favourite innovations. The responses were diverse, and if there is little consensus as to what innovation actually is, how can we organise ourselves to deliver it?

So you need to build some consensus as to what innovation actually means for your organisation and that requires a conversation that involves the whole business as well as your customers and partners.



**Roland
Harwood,**
co-founder,
100%Open

The old model of centralised R&D departments being the source of all innovation has long been replaced with innovation departments that are generally smaller, distributed and light in resources. This builds on open innovation, where you innovate with partners by sharing risk and reward.

However, a critical error some organisations make when embarking on open innovation is thinking that it means getting something for nothing. It is instead about getting something for doing things rather differently, and thinking in a new way.

Build and trade currencies of collaboration

Innovation requires leadership that inspires a movement, rather than dictates a strategy. You can no longer simply resort to the hierarchy to get stuff done and make decisions.

Progress happens much more organically though building trust with loose coalitions of partners. This requires a mindset and a culture that is much more collaborative.

Yet most conversations about innovation tend to start with "what" questions, such as "what is the problem or need that I have or that you can solve?". And these "what" questions typically quickly result in a discussion around ownership of intellectual property (IP).

While this is crucial, it is access to IP that is becoming more important than ownership and it is what you can do with them that really counts. Instead of starting with "what" questions it is often more productive to start with "who" questions, for example, "who do we want to collaborate with and what motivates them?".

IP, combined with a good reputation, are increasingly becoming the collaboration currencies that drive innovation. And the best way to build up these currencies is to start trading.

So start small, increase the number of conversations you are having and build your network, from which new relationships and ultimately collaborations will flow. ■

Common themes in the search for success

Gaule: Briefly describe your fund: when it was formed, size, funds deployed and business focus.

Lake: Cody Gate Ventures (CGV) was formed in August 2007. We have £110m (\$177m) under management. Our focus in the near term is to grow and exit the portfolio of seven companies we spun out of QinetiQ into CGV with the

financing help of Collier Capital. We do not have a set sector focus, but common themes are intelligent infrastructure, security (including energy security) and sustainability. Our model is different from traditional venture approaches in that we proactively look to create and build new businesses, leveraging our partners' domain knowledge to solve important market needs. With this approach we tend to be more hands on, have a smaller portfolio and a larger equity ownership than you might see elsewhere.

Gaule: Describe a current or new business to give us a feel for the ventures in your portfolio.

Lake: We have not been adding to our portfolio with new deals, but we do look at creating new businesses out of the portfolio we already have, as many of the companies have strong platform technology which can be applied to many markets. In that context, we have just created a new business out of Intrinsic (our nanotechnology company) focused on printed electronics using conductive inks to enable the printing of circuits on a variety of flexible substrates at room temperature. We are excited about the potential.

Gaule: I understand you have recently moved a number of your portfolio businesses to a technology cluster. Give us an insight into the approach you have taken.

Lake: We are creating a Cody Gate Innovation Centre in Rochester, New York, and three portfolio companies will be establishing a presence there. This initiative has both a near-term and long-term aim. We have been looking at geographic regions that have a high-quality technology-based talent pool, great educational and research institutions and a well-organised local business community, underserved by traditional venture firms. Rochester fits that profile. Our interest is in helping our current portfolio companies grow and developing innovation ecosystems that leverage the CGV model for new business creation and create future portfolio opportunities. Intrinsic Printed Electronics is a good example of a business that will really benefit from the Rochester location with its talent pool, including Kodak and Xerox.



As part of a series of interviews with leading venture investors and developers, Andrew Gaule, left, founder of the H-I Network and Corporate Venture Senior Executive Forum, talks to Stephen Lake, managing partner of Cody Gate Ventures



Gaule: What have you seen as the most challenging issues when managing the relationship with investors and ventures?

Lake: The recent recession has been a tough time to establish and grow early-stage technology companies, so it has taken a bit more cash and time to build business momentum. Working capital has been a challenge as many of the portfolio companies have now started to grow quite quickly, and at least in the near term, investor cash has had to be used to fund working capital – not ideal but necessary. We have also kept cash quite tight at portfolio companies during the recessionary period – which can frustrate management teams who are keen to spend. A recent benchmark study showed our companies used less cash than competitors over the last three years while remaining number one or two in their category. So overall, we have navigated through the issues quite well and all seven portfolio companies are progressing.

Gaule: What do you do to relax when you are not deal-making?

Lake: I bought the agricultural land behind our house, so we now have 25 acres to maintain. I really enjoy being out in the fields with the family, seeing the wildlife and the land come back to life as we improve it – we have been reclaiming old stream beds which were very overgrown these last few weeks. At home I have a large music collection that I am building and that can be broadcast wirelessly around the house. ■

Stephen Lake will be stimulating the discussion on the topic of new collaboration models and gaining government funding at the H-I Network Corporate Venturing Senior Executive Forum on June 23, 2011.

To contact Andrew Gaule and for future interview ideas email andrew.gaule@h-i.com and jmawson@globalcorporateventuring.com

Key to sustained innovation

Yoon: Why are Fortune 500 companies so focused on innovation, and why is leadership so important?

McKinney: Most companies are focused on seeking growth through innovation, as doing business as usual will not be sufficient in the face of global competition, technological disruptions and the dynamics of emerging economies. Leadership is key in successful corporate innovation, as change and disruption cannot happen without the critical support of top leadership. Leaders inside innovative companies need to provide the resources, air cover and the culture to drive new ways of approaching markets, products and services.

Yoon: Do you think the key success factors of corporate innovation programs vary, depending on size, industry, geography and culture?

McKinney: The dynamics of innovation are similar, whether you are trying to create innovation and change within a 100-person company or a Fortune 500 company. Successful strategies include effectively countering resistance to change, countering the not-invented-here syndrome, sustaining innovative practices, as well as creating a culture that embraces, believes in and practices innovative processes. At HP, my group develops adjacent or fundamentally new products and ideas. Every year, we evaluate more than 2,000 ideas, which get funnelled into 150 investable concepts. This group gets honed to 20 new, funded initiatives, where we invest \$50,000 to \$150,000 to validate the new concept, enter into customer validation, and market launch. This can take 18 to 36 months, but we stay focused on ensuring new idea generation as well as actually getting real products into the markets. We also have a compensation system that rewards failed initiatives as well as the successes to keep the risk-taking behaviours consistent within the innovation group.

Yoon: How have you tackled communicating change initiatives within the organisation, and creating a common language of innovation?

McKinney: The most effective changes have been executed and embraced through telling stories that resonate with the personal motivations and goals of the people I engage with. Understanding the company culture and communicating in a manner that is effective within that culture is key to success.

Yoon: As creativity quotient is needed now even more than a person's emotional or intelligence quotient, how well can people, teams and organisations enhance and strengthen their creativity quotient?

In the first of a series of interviews of senior executives, Kyung Yoon, chief executive of Talent Age Associates, a global talent management firm speaks to Phil McKinney, vice-president and chief technology officer of the Personal Systems Group at Hewlett-Packard



McKinney: Human creativity can be developed and taught. It is not God-given, as many believe. Learning to ask key questions can unlock new ways of perceiving problems and formulating new solutions to real needs. The best way to come up with new and creative ways to innovate is through direct customer and market observation. For example, I spend many Saturdays at [electronics retailer] Best Buy stores whenever I am travelling, observing and talking to real customers. At HP, we also conduct "trend safaris" into the field to find unmet product needs. Dream Screen is a good example of a new product for the Indian market that was developed through this process. My teams actually lived inside 2,600 homes throughout India to observe what was needed, how they made buying decisions and what was valued in a communication device. The result was a simple, easy-to-use screen with no operation system that could dial a phone number with one touch of the screen. The key to innovate successfully inside large organisations is constantly to drive innovation evangelising messages and missions, and to have a process for driving change.

Yoon: What are the key traits of successful innovation leaders?

McKinney: They are diversity of experience, combined with core knowledge and competencies. The best innovation talent for my team can be described as a T-shaped professional. I look for deep expertise in technology, marketing or other relevant functions, but then also make sure they bring a wide range of diverse experiences. Passion and the ability to deliver the message of innovation are also critical to successful leaders in corporate innovation.

McKinney was interviewed at the 13th Annual IBF Corporate Venturing and Innovation Partners Conference. He also reaches a regular audience of more than 40,000 with his weekly podcast (www.killerinnovations.com), and his blog (www.philmckinney.com) on innovation and its impact on business, industries, economies and society. ■

Deal round-up: February

This table summarises last month's deal activity with a corporate venturing involvement. For full coverage on each deal as well as all other news, visit www.globalcorporateventuring.com

To report a March deal in next month's issue of Global Corporate Venturing, contact James Mawson at jmawson@globalcorporateventuring.com

Sector	Company	Location	Round	Round size (\$m)	Aggregate raised (\$m)	Venture participants
Clean-tech	Entelios	Germany	A	undisclosed	undisclosed	Yellow&Blue Investment Management, High-Tech Gründerfonds
Clean-tech	GroSolar	US	exit to SolarCity	undisclosed	>16	Mayfield Fund, Draper Fisher Jurvetson, DBL Investors, Generation Capital
Clean-tech	Fisker Automotive	US	undisclosed	150	500	Khosla Ventures, Virgin's Green Fund, Burrill, the Malaysian state's Life Sciences Capital Fund, Lanxess
Clean-tech	BrightSource Energy	US	E	89.6	276	undisclosed
Clean-tech	Transphorm	US	C	20		Google Ventures, Kleiner Perkins Caufield & Byers, Foundation Capital, Lux Capital
Clean-tech	Openhydro	Ireland	undisclosed	19	>132	DCNS
Clean-tech	Soladigm	US	C-extension	10	61	Westly Group, Navitas Capital
Consumer	Divergence	US	exit to Monsanto	undisclosed	>20	Cultivian Ventures, Prolog Ventures
Consumer	BookRenter	US	C	40	>50	Comerica Bank, Focus Ventures, Lighthouse Capital Partners, Adams Capital Management, Norwest Venture Partners, Storm Ventures
Consumer	EcoATM	US	A	14.4	14.4	Coinstar, Claremont Creek Ventures
Consumer	Recycle Rewards	US	C extension	14	>77	Physic Ventures
Consumer	Milk Mantra Dairy	India	A	5	5	Aavishkaar Venture Management Services, angel investors
Consumer	CashStar	US	B	5	9	Passport Capital, Allen
Consumer	LibreDigital	US	C	4	31.1	S3 Ventures, Adams Capital Management, Triangle Peak Partners, HarperCollins Publishers, The New York Times Company, Noro-Moseley Partners
Consumer	Tanfield Food Company	UK	L	1	>7	Inventages Venture Capital
Financial	Twitpay	US	undisclosed	undisclosed	undisclosed	CompuCredit
Financial	Wonga	UK	C	120	148	Wellcome Trust, Oak Investment Partners, Meritech Capital Partners, Accel Partners, Balderton Capital, Dawn Capital, Greylack Partners, TAG
Financial	SponsorPay	Germany	A extension	5	10	Nokia Growth Partners
Financial	Plastyc	US	undisclosed	2	>2	Core Innovation Capital
Health	Calistoga Pharmaceuticals	US	exit to Gilead Sciences	375	>70	Quogue Capital, Alta Partners, Frazier Healthcare, Three Arch Partners, Latterell Venture Partners, Amgen Ventures
Health	Gevo	US	ipo	107.25	57.6	Total Energy Ventures International, Khosla Ventures, Virgin Green Fund, Burrill, Life Sciences Capital Fund, Lanxess
Health	AcelRx Pharmaceuticals	US	ipo	86	42.8	Kaiser Permanente Ventures, Alta Partners, Skyline Ventures, Three Arch Partners
Health	Viamet Pharmaceuticals	US	C	25	47	Lilly Ventures, Novartis Option, Intersouth Partners, Hatteras Ventures, Lurie Investment Fund
Health	Elenza	US	B	24	>24	Itochu, Carlyle Group, Delphi Ventures, undisclosed strategic corporate investor
Health	Sonoma Orthopedic Products	US	D	22	47	Ascension Health Ventures, Split Rock Partners, Legacy Life Sciences, EDF Ventures, MedVenture Associates, DFJ InCube Ventures, Emergent Medical Partners, Asset Management Partners
Health	Versartis	US	B	21	32	Amunix, New Leaf Venture Partners Advent Venture Partners, Index Ventures
Health	Conatus Pharmaceuticals	US	B	20	53	AgeChem, Aberdare Ventures, Advent Venture Partners, Bay City Capital, Gilde Healthcare Partners, Roche Venture Fund
Health	High Throughput Genomics (HTG)	US	D	15.7	>25.7	Novo, Merck Capital Ventures, Fletcher Spaght Ventures, Solstice Capital, Valley Ventures
Health	IntegenX	US	C	15.6	20.1	In-Q-Tel, Domain Associates, RONAholdings
Health	Ocular Therapeutix	US	D	14	36	Ascension Health Ventures, others
Health	Kinaxo Biotechnologies	Germany	exit to Evotec	10	undisclosed	High-Tech Gründerfonds
Health	CalciMedica	US	D	9.2	28	SR One, Biogen Idec New Ventures, Sanderling Venture
Health	Neuralitic Systems	Canada	B	8	20	BlackBerry Partners Fund, BDC Venture Capital, Vertex Venture Capital, Go Capital, Export Development Canada
Health	Orphazyme Aps	Denmark	seed	4	4	Novo, Sunstone Capital
Health	Biopharmacopae Design International	Canada	B	2	>2	Avrio Ventures
Health	SironRX	US	A	0.5	0.5	Cleveland Clinic Innovations, JumpStart
Industrial	MobileTag	France	undisclosed	9	9	Skandinaviska Enskilda Banken Venture Capital, SEB Ventures, XAnge Private Equity, Alven Capital
Industrial	Novacem	UK	seed	3	3	Laing O'Rourke, Royal Society Enterprise Fund, Imperial Innovations, London Technology Fund.
IT	Kyte	US	exit to KIT Digital	undisclosed	>21	Atomico Ventures, Draper Fisher Jurvetson, Holtzbrinck Ventures, NTT's Docomo Capital, Nokia's Growth Partners, Disney's Steamboat Ventures, Swisscom Ventures, Telefonica, Teliasonera's Intellect Capital Ventures

Deal round-up: February

Sector	Company	Location	Round	Round size (\$m)	Aggregate raised (\$m)	Venture participants
IT	Cigual	UK	undisclosed	undisclosed	>1.25	One97 Communications, Tomorrow Ventures, Par Equity, Scottish Investment Bank
IT	Silicon Hive	US	exit to Intel	undisclosed	17	Intel Capital, New Venture Partners, TVM Capital
IT	CloudMade	US	C	undisclosed	>12.3	Intel Capital
IT	InVisage Technologies	US	C	undisclosed	undisclosed	Intel Capital, RockPort Capital, InterWest Partners, OnPoint Technologies, Charles River Ventures
IT	Borqs International	China	C	undisclosed	>17.4	Intel Capital
IT	SecureKey Technologies	Canada	undisclosed	undisclosed	undisclosed	Intel Capital
IT	Embotics	Canada	B	undisclosed	>4	Tera Capital, Covington Capital, undisclosed
IT	SecureKey Technologies	Canada	undisclosed	undisclosed	undisclosed	Intel Capital
IT	Inlet Technologies	US	exit to Cisco Systems	95	>20	Capitol Broadcasting Company, Core Capital Partners, Technology Venture Partners, Telecommunications Development Fund
IT	AppSense	US	undisclosed	70	>70	Goldman Sachs
IT	Violin Memory	US	B	35	>55	Juniper Networks, Toshiba's America Electronic Components, undisclosed corporate partners, crossover investment funds, high net worth investors and private equity firms
IT	Aria Systems	US	C	20	34	InterWest Partners, Hummer-Winblad, Venrock, undisclosed
IT	Vitruve	US	C	17	>27	Comcast Interactive, Scale Venture Partners, Advent Venture Partners, General Catalyst Partners, Dace Ventures
IT	Meraki Networks	US	C	15	40	Sequoia Capital, DAG Ventures, Northgate Capital, Google
IT	Coupa Software	US	D	12	27	Mohr Davidow Ventures, El Dorado Ventures, Battery Ventures, BlueRun Ventures
IT	AirWalk Communications	US	B	10	38	Nedelco, Sevin Rosen Funds, TL Ventures, Alta Berkeley, Duchossois Technology Partners
IT	VisionOSS (Voss)	UK	C	10	23.5	Intel Capital, Eden Ventures, XAnge
IT	Cooliris	US	C	9.6	29.6	T-Venture, Kleiner Perkins Caufield & Byers, DAG Ventures, Westly Group
IT	Basho Technologies	US	D	7.4	9.4	Trifork
IT	Blinq Networks	Canada	A	7.4	7.4	New Venture Partners, Summerhill Venture Partners, Business Development Bank of Canada
IT	Nistica	US	D	5.5	19.7	Battelle Ventures, Technology Venture Partners, Novitas Capital, MMV Investment Partners, Fujikura, NTT Electronics
IT	ThingWorx	US	B	5	>5	Safeguard Scientifics, others
IT	Tela Innovations	US	undisclosed	4.75	>10.25	undisclosed
IT	Seismic	US	undisclosed	4	16	Salesforce.com, Softbank Group
IT	Datacastle	US	undisclosed	2	>2	CM Capital, Haag
IT	Personera	South Africa	A	1.4	1.6	Hasso Plattner Ventures Africa
IT	AirPos	Ireland	A	0.35	0.35	Giant Associates, angels, E-Synergy
Media	Jagex	UK	undisclosed	undisclosed	undisclosed	Insight Venture Partners, Spectrum Equity, Raine Group
Media	Meebo	US	acquisition of Mindset Media	undisclosed	70	Khosla Ventures, Sequoia Capital, Draper Fisher Jurvetson (DFJ), Jafco, Time Warner Investments
Media	Catch Media	US	undisclosed	undisclosed	undisclosed	Motorola Mobility Ventures
media	Riot Games	US	exit to Tencent	400	15	Tencent, Benchmark Capital, Firstmark Capital
Media	Synacast	China	D	250	286	Softbank
Media	PlaySpan	US	exit to Visa	190	58.8	Vodafone Ventures, Softbank, Menlo Ventures, STIC Investments, Novel TMT Ventures,
Media	Kaltura	US/Israel	D	20	34	Intel Capital, Nexus Venture Partners, .406 Ventures and Avalon Ventures, Silicon Valley Bank
Media	Yoyi Media	China	B	20	32	Oak Investment Partners, Steamboat Ventures, Gobi Partners
Media	Rdio	US	undisclosed	17.5	>17.5	Skype, Mangrove Capital Partners, Atomico
Media	Digital Chocolate	US	D	12	55.8	Intel Capital, BridgeScale Partners, Sutter Hill Ventures
Media	Voddler	Sweden	undisclosed	8	undisclosed	Nokia Growth Partners
Media	TuneUp	US	C extension	2	14.8	IDG Ventures
Media	UP Web Game	Germany	undisclosed	1.4	>1.4	RapidShare Entertainment, Mountain Super Angel, United Prototype Ventures, High-Tech Gründerfonds
Services	Transpera	US	exit to Tremor Media	undisclosed	17.25	Intel Capital, Blackberry Partners Fund, Flybridge Partners, First Round Capital
Services	Rearden Commerce	US	undisclosed	47	247	undisclosed
Services	Pharmaron	China	C	40	>40	Legend Capital, DCM, GL Capital Group
Telecoms	Verve Wireless	US	acquisition of Deconstruct	undisclosed	>7	BlueRun Ventures, Associated Press
Telecoms	Motricity	US	acquisition of Adenyo	100	>365	Intel Capital, Qualcomm Ventures
Transport	Management Dynamics	US	E	30	>30	Goldman Sachs
Utilities	Cuculus	Germany	undisclosed	undisclosed	undisclosed	Thomas Claus, investment manager at T-Venture
Utilities	SmartSynch	US	E	25.7	>92.7	undisclosed

Source: Global Corporate Venturing

BMW revs up venturing move

Germany-based car maker Bayerische Motoren Werke (BMW) has set up a \$100m corporate venturing fund as part of a division working on sustainable cars and made its first deal.

The company will sell two cars, BMW i3 and BMW i8, from 2013 under the sustainable BMW i brand and invest in seed and series A round deals through the BMW i Ventures team.

US-based MyCityWay is the first company in which BMW i Ventures has taken a stake alongside venture capital firms FirstMark Capital and IA Ventures and state fund New York City Economic Development Corp.

In May at a news provider TechCrunch event, city mayor Michael Bloomberg said the city (with \$3m) and FirstMark (the remainder) had set up a \$22m fund with MyCityWay as its first deal.

Ian Robertson, member of BMW's board of management, said: "I am thrilled to announce that we have just signed our first strategic partnership with MyCityWay. As a mobile app, MyCityWay provides users with information



Electrifying: The BMW i8 hybrid

on public transport, parking availability, and local entertainment for over 40 cities in the US. Another 40 cities will be part of the global roll-out."

BMW said it had been working on BMW i since 2007, but even as late as December was denying any such plans or activities when asked by Global Corporate Venturing.

Robertson said: "The products and services have been conceived around a revolutionary approach: purpose designed and purpose built for sustainable, premium mobility. It is a new day in our industry, a new era for individual mobility. This is BMW i – born electric."

JPMorgan plans internet fund

US-based investment bank JPMorgan Chase has raised at least \$1.2bn in a quasi-corporate venturing fund for internet and new media companies, according to news provider Wall Street Journal.

The money came from JPMorgan's private banking clients rather than the bank itself, news reports added.

The fund follows investment bank Goldman Sachs's \$1.5bn funding for social network Facebook, two-thirds of which came from overseas private banking clients of the Wall Street firm.

Goldman and Digital Sky Technologies, a Russian investment firm, invested \$500m of their own money in Facebook.

PlayPhone puts \$10m into games

US mobile device publisher PlayPhone has started a \$10m quasi-corporate venturing fund for developers of social games. The 2011 PlayPhone \$10m Social Power-Up fund will help companies monetarise their mobile social games launched on PlayPhone Social's platform.

Anders Evju, general manager of PlayPhone Social, said: "We are one of the first in mobile social gaming to offer developers a development environment with mobile browser functionality supporting iOS and Android."

Founded in 2003, PlayPhone has raised nearly \$30m from venture capital firms Menlo Ventures, Scale Venture Partners, Cardinal Venture Capital and Coral Group.

Clean-tech focus for Tata Consultancy

Tata Consultancy Services (TCS), Asia's largest information services provider, will increase its focus on renewable-energy technologies and cloud computing, the company's global head of corporate venturing told newswire Bloomberg.

Ajoy Mallik, global head of venture capital, private equity, incubation and co-innovation (Coin), said: "These [wind, water, biomass and fuel cells technologies] are the growth engines of the future."

Coin is the external co-innovation business unit of TCS under its chief technology officer Ananth Krishnan and centred around venture funds and start-ups.

Taj Pharmaceuticals starts fund to support spin-outs

India-based drugs company Taj Pharmaceuticals has set up a corporate venturing fund to support spin-out companies as peers plan novel approaches to future medical treatments.

The company was unavailable to provide further details.

Separately, UK-listed drugs group GlaxoSmithKline (GSK) has signed the first of 10 planned development deals with a leading academic while US peer Eli Lilly is raising \$750m for three corporate venturing funds.

News provider Financial Times (FT) said Prof Mark Pepys, head of medicine at the Royal Free and University College Medical School in London, would develop a treatment for a rare form of amyloidosis by staying in academia while GSK provided facilities, funding and performance fees.

Prof Pepys's company, Pentraxin Therapeutics, receives a small fee allowing GSK to gain an exclusive licence on the patents he has filed on his experimental drug.

Patrick Vallance, senior vice-president for drug discovery and development at GSK, told the FT he planned to sign 10 deals this year. He added: "We want a model that allows academics to work all the way through, getting a big reward if a medicine is launched and playing to their strengths. They could go to biotechs, or publish papers, but if they want to make a medicine, we will partner for the end-game."

However, Vallance told the FT university technology transfer offices that typically seek to license academics' ideas with high initial fees were excessively restrictive.

Also in the FT, Eli Lilly said it would raise up to \$750m through three funds to share drug development costs and potential benefits with venture capitalists and external researchers.

Lilly will put up to \$50m into each of three Mirror Portfolio funds containing up to 20 experimental medicines from different therapeutic areas, designed to take them through

the high-risk phase from a year before testing in humans until the mid-stage clinical trials, the FT said.

Lilly will provide up to half the experimental drugs to be tested by standalone virtual drug companies, substantially expanding its mirror pipeline of research and having first right of refusal on fair market terms to any that provide promising results.

An unnamed venture capital firm participating in the Mirror Portfolio has already acquired two molecules and will oversee the next stage of their development, Lilly said.

The first is a molecule developed pre-clinically by researchers at a major academic institution that is being studied as a potential treatment for congestive heart failure. The second molecule was developed by Lilly and is being studied for its potential in bone healing and cancer treatment.

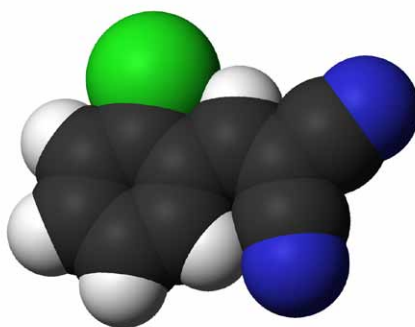
The Mirror Portfolio aims to speed up this stage of development to three years at an average cost of \$10m each, with

Eli Lilly then having preferential access, the FT said.

Robert Armstrong, vice-president of global external research and development at Lilly, said: "The licensing of these molecules by the independent funds is an important milestone for the Mirror Portfolio."

"Another benefit of the Mirror Portfolio is that it provides access to capital, capacity, capability and deep disease expertise that can be focused on developing molecules generated in research institutions or biotechnology companies, with the potential for rights to successful molecules to be purchased by Lilly."

Jan Lundberg, executive vice-president of science and technology and president of Lilly Research Laboratories, added: "Lilly's establishment of the Mirror Portfolio supports our innovation strategy, which consists of three key components – molecule uniqueness, speed and cost efficiencies – which together are the cornerstone of our research and development philosophy."



Intel forges link with Reliance and Toshiba

India-based conglomerate Reliance Industries and Japan's Toshiba will join a global co-investment programme led by US-listed semiconductor company Intel's corporate venturing unit, according to news provider Economic Times.

Mukesh Ambani's Reliance group is investing in technology and life sciences and has a \$250m fund, the same size as Intel's vehicle for the country, Intel Capital India Technology Fund, which was started in mid-2005. An industry source told Economic Times: "The two funds are

yet to close a joint deal in India but they are in the process of evaluating an investment."

A source with direct knowledge of the development told the news provider: "Syndicate partners such as the Ambani-led fund will provide additional rounds of capital to fast-growing technology firms." A private equity executive told Economic Times: "Such partnerships provide funding for fast-growing companies in the Intel Capital portfolio, while syndicate partners get access to strategic technology deals."

Merck tags \$125m to build on research and development

US-based drugs company Merck has launched a \$125m corporate venturing fund to build on last year's \$8.1bn internal research and development budget.

The Merck Global Health Innovation group is a limited liability company managing a fund of the same name looking to identify new business models and external opportunities in healthcare fields adjacent to its main medical areas, which include diabetes and vaccines.

The launch follows the creation of Merck Funds in 1983 and Merck Capital Funds in 2000 with \$100m.

The Global Health Innovation team of five, led by William Taranto, former executive director of healthcare strategy and alliances at medical devices company Johnson & Johnson until April last year, reports to Merck's chief strategy officer and will invest in external venture deals as well as ideas developed internally by employees.

Deals are expected to fall into six areas – flexible access/alternate site of care, health innovation in disease management, providing health content through coaching or interactive media, diagnostics and devices, personalised medicine and informatics.

Merck's annual results for 2010 showed \$810m of net income on \$46bn of sales. In a presentation at the IBF Corporate Venturing and Innovation Partnering conference, Taranto said the pressures facing the pharmaceutical industry included higher development costs for new drugs with pressure on fees and greater demands for showing value while the life of the drugs was shortening through the use of generics and global competition.

...and invests in AmorChem

Merck will invest C\$6.8m (\$6.9m) in AmorChem, a Canada-based life sciences venture capital fund, just days after setting up its own corporate venturing unit.

Merck last year agreed to invest C\$100m over five years in research and development in Quebec, a province of Canada.

The majority of the C\$41.25m AmorChem fund will come from Investissement Quebec and FIER Partenaires (a Quebec government-sponsored fund) as well as C\$8.25 in total from companies, such as Merck.

The Quebec government last year set up Real Ventures as a C\$50m fund for high-tech startups and provided Cycle Capital with C\$41.5m last month for the clean-tech sector.

Louis Lacasse, manager of AmorChem along with Elizabeth Douville, Inès Holzbaur, Martial Lacroix, Nicola Urbani and Maxime Pesant, told news provider Montreal Gazette: "We will be investing in technologies, rather than companies, in order to avoid investing in expensive infrastructure and having to hire managers.

"We will fund them to the point when they can be tested on animals or humans, and then we will sell it or license it to a pharmaceutical company.

"For example, if we have four different molecules that can be used to treat migraines, then we could put together a migraine company, so that if one fails, you have the others to work on. It diminishes the risk."

Lacasse said the fund would finance about 40 projects over the next five years.

Fund reaches \$100m with plans to mine another \$200m

New Africa Mining Fund (NAMF) has raised \$100m for its second venture capital fund from development organisations as it taps companies and other investors to try to gain a further \$200m in commitments.

Neil Gardyne, principal at NAMF, said: "By NAMF II's second closing on January 31, 2012, we hope to have a total commitment of \$300m. A priority for us between now and then is to attract more investors of the calibre of those already committed, namely the Development Bank of Southern Africa, African Development Bank, International Finance Corporation, Swiss Investment Fund for Emerging Markets and DEG KfW Bankengruppe."

Like its predecessor, NAMF II will provide risk capital for junior mining companies with projects, excluding diamonds and uranium, in Africa, that can demonstrate a minimum 35% return on investment. NAMF II will have a life of eight

years with capital commitments made over the first five years and returns concluded by the end of the eighth year.

Gardyne said: "Our commitment to World Bank performance standards, aligned to the Equator Principles, and to the Extractive Industries Transparency Initiative, means we must see those junior miners in which NAMF II is invested delivering the likes of jobs, infrastructural development and contributions to the treasury and foreign exchange reserves of their host countries."

The 10 African mining projects in which NAMF I was invested ultimately delivered an internal rate of return of 39%. Key investments included Johannesburg and Alternative Investment Market-listed Petmin, which has developed the successful Somkhele anthracite mine in South Africa's Kwazulu-Natal province, and Zambian copper miner Kiwara.

EIF prepares funds for non-institutional investors

The European Investment Fund (EIF), the publicly and privately-funded body which provides risk financing to small and medium-sized companies in the European Union's (EU) 27 member states, has started laying out its strategy for equity investments over the next decade by setting up a €250m (\$340m) corporate venturing vehicle and a co-investment fund for non-institutional investors.

The EIF, which manages €4.6bn in more than 300 primarily venture capital funds and is the largest investor in the asset class in Europe, has agreed to start a European Co-Investment Fund – a working title – for a new, government-sponsored pilot project being tested over the next three years.

This fund will co-invest equally with non-institutions, such as business angels, family offices, pledge funds and corporate venturing units. The pilot, which follows an original project in 2003, will start in Germany with €50m to €60m from the country and the European Investment Bank. The EIF will be fine-tuned over three to four years before it is rolled out as part of the 2020 programme.

Matthias Ummenhofer, head of venture capital at the EIF, said non-institutions were responsible for 60% to 70% of seed to early-stage deals and an important element to support.

The pilot co-investment fund will complement a planned €250m BioE 2020 fund for life sciences. This fund will have up to six strategic investors backing four to five non-traditional general partners that will invest the money in biotechnology entrepreneurs. However, unlike the EIF's existing fund of funds for venture capital firms, BioE will commit money to emerging teams of healthcare investment entrepreneurs.

Ummenhofer, who plans to launch the project at the Global Corporate Venturing symposium on May 18 in London (see advertisement, page 5), said: "BioE 2020 is effectively project financing for development programmes. The fund will be invested in about 18 months and projects developed over three to four years, and then money can start to be paid back in royalties and milestones.

"For corporations, it is corporate venturing-lite as it offers them access and learning and scale at a low risk [in an industry where] open innovation is a bitter reality.

"The EIF can play a role as honest broker, setting the rules of game and observance through transparency of dealflow and yellow and red cards for the players. There is a role for the public sector but in joining forces with other market participants."

He said the changes were being made as part of the EU's Innovation Union 2020 project to make the continent more competitive. He added: "For the past 10 years, the EIF has primarily been a fund of venture capital funds [as well as a large lender] so we decided to build a toolkit for financial sustainability.

"These tools are to make good investments so in the medium to long-term the EIF is financially self-sustaining and there are more backflows than investments except during downturns when we are counter-cyclical and invest more."

The EIF has already expanded its remit by investing in micro-finance institutions, such as €1m in Italy-based Per-Micro for 20.4% of its shares, but is also considering how universities can transfer ideas and technologies, and philanthropy can aid social entrepreneurs through so-called impact investing.

EU states endorse Innovation Union proposals

The European Union's (EU) 27 member states have endorsed the European Commission's Innovation Union proposals just as the head of the London Stock Exchange (LSE) calls for companies to be given tax breaks to invest in start-ups.

EU leaders through the governing Council have proposed a single European patent, completing the European Research Area, joint research programming, moves to create a single European market for venture capital, effective standardisation and using public procurement as a driver of innovation.

José Manuel Barroso, president of the European Commission, said despite the short time available, the EU Council had reached, "very important conclusions on innovation".

Barroso is reportedly presenting innovation as an overarching concern that should steer what happens in other

areas, saying before the summit: "Innovation needs to be part of our economic policy, not simply a research instrument."

Xavier Rolet, chief executive of the LSE, writing in UK newspaper The Times, said: "Capital has not become scarce, it is just not being utilised.

"One way is to get blue chips [large companies] to invest in start-ups. A new investment tax credit scheme, encouraging big corporates to invest cash in innovative tech start-ups (high, green and bio) would help to kick-start SME job creation. Blue chip companies are better placed than most to pick tomorrow's winning technologies in their own sectors."

He added removing the "perverse" tax incentive towards debt would end the second obstacle. In the UK, he said equity was taxed four times through the cycle against tax deductibility for debt's interest.

China's CAS sets up Jiahe Venture Capital Fund

The Chinese Academy of Sciences (CAS) has set up a quasi-corporate venturing fund to be managed by its affiliate, Oriental Scientific Instrument Corporation.

The CAS Jiahe Venture Capital Fund was set up by the academy in the first industrial technology centre in north-eastern China's Harbin city.

The centre, in a science and technology innovation park, will have three to four industrial technology innovation platforms for more than 10 research teams from the Chinese Academy of Sciences by next year.

Three to five engineering technology centres are also expected to be built to carry out at least 15 industrial projects, which are estimated to be capable of achieving more than RMB3bn (\$460m) in sales.

The first 12 projects are involved in intelligent monitoring, pollution control processes, micro-power systems and the internet and will receive RMB720m from the local government.

Separately, one of the founding fathers of Chinese venture capital, Liu Chuanzhi, chairman of computer maker Lenovo and its corporate venturing unit Legend Capital, said innovation was a priority for the country.

Liu told news provider San Francisco Chronicle: "The Chinese government has attached exceptional promi-

nence to innovation. There is a neighbourhood in Beijing called Zhongguancun where most of the universities and research institutes are located. The area is now home to a lot of people who studied abroad and went back to China.

"Also, it gets a lot of venture capital and the government is also giving it preferential treatment. We would call it an incubator neighbourhood. Quite a number of the Chinese companies that have now gone on to list on Nasdaq started in Zhongguancun."

Liu added that there were potential headwinds to its development. He said: "Chinese enterprises are still facing many, many different problems just as American companies are. As China continues to develop, it is going to come up against the problem of a lack of resources. Social polarisation in China is also becoming a serious problem, as is the question of how the government is going to keep tabs on itself and overcome the problem of corruption.

"In addition, in 10 years China is going to be up against the issue of an ageing population. So it is not going to be easy for the government to figure out before these problems come to a head exactly how to deal with them.

"That is why I have pretty much no reaction to how many patents are filed in China or whether China is the second-biggest or third-biggest economy in the world."

Blackberry Partners Fund to start investing in June

The \$150m BlackBerry Partners Fund II will invest exclusively in mobile computing companies from June this year and will have a broader international mandate than the first fund.

Research In Motion (RIM), a Nasdaq and Toronto-listed phone maker, Ontario Venture Capital Fund, a C\$205m (\$207m) Canada state-backed investment fund, and Royal Bank of Canada (RBC) had previously agreed to be lead investors in the second BlackBerry Partners Fund.

RIM was a lead investor in the first fund, which was started in 2008 by RIM, media group Thomson Reuters and RBC, which had also co-managed the fund with venture capital firm JLA Ventures before the teams' integration.

BlackBerry Partners Fund I has made 13 investments in Canada, the US, Israel and Ireland.

Jim Balsillie, co-chief executive of RIM, the maker of the BlackBerry phone, said: "We are very pleased with the positive impact of the first fund on our mobile ecosystem and we look forward to BlackBerry Partners Fund II bringing additional resources and support to mobile innovators in a broader range of international markets."

KBS+P Ventures plans 10-15 investments this year

US-based advertising agency Kirshenbaum Bond Senecal and Partners has started a corporate venturing unit to invest in ad technologies, mobile and design.

The first deal of KBS+P Ventures is YieldBot, an online analysis provider. Darren Herman, founder of Varick Media Management, is managing director of KBS+P Ventures, which will invest \$50,000 to \$200,000 per deal.

Herman said: "KBS+P Ventures is backed by MDC Partners and Kirshenbaum Bond Senecal & Partners, a business transformation agency headquartered in New York. We have not disclosed the amount we are putting to work but intend to do 10-15 investments in 2011."

In his blog, Herman said: "My belief is that 98% of new ideas are not really new. They are repackaged and spun differently to the marketplace.

"I have been through the first dot.com wave and learned quite a few lessons and look forward to applying them to my latest endeavours."

Kirshenbaum Bond Senecal & Partners is owned by MDC Partners. Its clients include car maker BMW, drinks group Coca-Cola, and jeans maker Levi Strauss.

Rhodia joins founding investors in Aster II

Aster Capital, a France-based venture capital firm formed by the merger of two corporate venturing units, has added local chemicals company Rhodia as its third investor, or limited partner (LP).

French engineering companies Alstom and Schneider Electric formed Aster in January last year out of Schneider Electric Ventures – founded in 2000 with a €50m fund.

The first close of Aster II fund was at €70m (\$100m) in January 2010, with €40m from Schneider Electric and €30m from Alstom. Rhodia has committed an estimated €15m to make a second close of Aster II at €85m for a fund targeting €120m to €150m. Financial LPs are expected to make up the balance later this year.

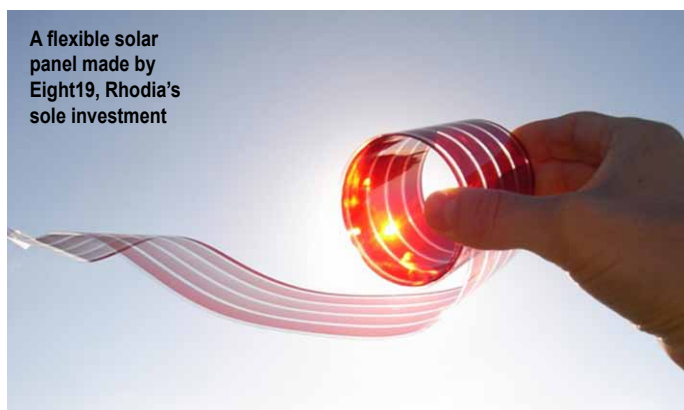
The fund has already made one, undisclosed seed-round investment.

Rhodia's only previous corporate venturing deal was Eight19, a UK-based flexible solar panel company spun out of Cambridge University, which is held separately from Aster II.

Cédric Latessa, a partner at Aster, said: "[Rhodia is] very complementary to our two corporate sponsor LPs as they give us further depth and expertise in important clean-tech sectors – green chemicals, new materials and recycling."

Companies in the fund's portfolio will also have access

A flexible solar panel made by Eight19, Rhodia's sole investment



to the global network of each of the three LPs while Aster has set up a global network by hiring Todd Dauphinais in September to open its US office. Kevin Cai is in China and Adrien Berber is in Japan.

For a panel discussion, moderated by James Mawson editir of Global Corporate Venturing, involving Aster Capital's Latessa at a New Energy World conference earlier this year, also including BP's John Steedman and Robert Bosch Venture Capital's Markus Thill, visit www.zshare.net/audio/869062562be53dc2/

Phase4 finds independence Responsibility raises \$15m

Phase4 Ventures, the UK-based life sciences corporate venturing unit of Japanese bank Nomura International, has spun out as an independent entity.

Nomura will retain seven companies with the rest sold to fund manager HarbourVest Partners.

Led by managing partner Denise Pollard-Knight, Phase4, which has dropped Nomura from its name, will manage its existing fund for Nomura and a new vehicle with HarbourVest's money that includes five existing deals.

The five are: Albireo Pharma, Nabriva Therapeutics, Chroma Therapeutics, Oncomed Pharmaceuticals and Paratek Pharmaceuticals. Another fund will be raised to look at new deals.

Phase4 has made more than 30 deals since 1999 by investing \$15m to \$30m in each portfolio company. Its exits include Intercell, Pharmion, Targacept and, most recently, Proteolix, which was sold for \$276m in cash and up to \$575m in performance fees to Onyx Pharmaceuticals in October 2009.

Tarun Jotwani, chief executive of Europe, Middle East and Africa for Nomura, said: "It was always intended Phase4 would develop as an independent business."

Responsibility Social Investments, a Switzerland-based investment company, has raised \$15m for its first quasi-corporate venturing fund to invest in companies that provide basic services in energy, agriculture and information and communication to poor people in emerging markets.

The fund invests in companies that are working to tackle inefficiencies in developing countries, such as high transport costs and inadequate distribution channels, with the aim of providing basic goods and services of not only social but also commercial value to people at the base of the pyramid, the estimated 3 billion people in Asia, Latin America and eastern Europe who do not have adequate access to these services.

This fund has been developed in collaboration with Helvetas, a private development organisation in Switzerland, and the Doen Foundation, a development fund based in the Netherlands. It is further supported by the Swiss State Secretariat for Economic Affairs, the Swiss Agency for Development and Cooperation and the SNV Netherlands Development Organisation.

Responsibility Social Investments manages \$800m and is backed by Swiss financial institutions, including Baumann & Cie, Banquiers, Credit Suisse, Raiffeisen Schweiz, Swiss Re, Bank Vontobel and George Avenue.

UK bank fund hires chairman and chief executive

A £2.5bn (\$4bn) corporate venturing fund backed by the UK's six biggest banks has hired its chairman and chief executive ahead of investing up to 75 companies per year.

The Business Growth Fund will be chaired by Sir Nigel Rudd, also chairman of airports operator BAA, and managed by Stephen Welton, managing partner of investment bank JPMorgan's former leveraged buyout manager CCMP Capital, as chief executive.

The fund will start investing £2m to £10m in companies with an annual turnover of between £10m and £100m in April. It is backed by Barclays, HSBC, Lloyds, Royal Bank of Scotland, Santander and Standard Chartered, and will take between 10% and nearly 50% of a portfolio company



Chairman:
Sir Nigel
Rudd

in return for an investment held over five years.

Sir Nigel told news provider Financial Times: "If we invested, we would want a seat on the board – that would be a prerequisite. I hope we can make 15% a year."

The fund has increased in size from its original plan. Former UK Chancellor of the Exchequer Alastair Darling

had hoped to raise a £500m fund before the change of government, when the pot was increased in October to £1.5bn to be invested over several years. The extra £1bn has come as part of renewed pressure on the banks following larger profits.

The October plan was to invest £350m over two years with the remainder by 2020.

Neuralitic hires

Neuralitic Systems, a Canada-based provider of mobile data analysis, has raised \$8m in its series B round and hired Luc Filiatreault as chief executive.

BlackBerry Partners Fund, a corporate venturing fund backed by investors including phone maker Research In Motion, reinvested, alongside BDC Venture Capital, Vertex Venture Capital and Go Capital, while Export Development Canada led the round as a new investor.

Filiatreault has founded and led five companies in the software and technology sectors, of which two went public within 36 months.

Genocea promotes Clark

Genocea Biosciences, a US-based vaccine development company backed by GlaxoSmithKline's (GSK) corporate venturing division, has promoted Chip Clark to executive president six months after he joined the company as chief business officer. He replaces Staph Leavenworth Bakali.

Clark had previously been chief business officer at Vanda Pharmaceuticals, and a principal at Care Capital, a venture capital firm that invested in Vanda.

George Siber, executive chairman of Genocea's board, said: "In Chip's short time at Genocea, he has proven himself to be a tremendous asset to the company."

The company said Clark "played a critical role in closing the company's \$35m round of series B financing announced last month".

Two other corporate venturing units joined drugs company GSK's SR One unit in the B round – Johnson & Johnson Development Corporation and Mitsubishi's MP Healthcare Venture Management.

Blinq raises \$7.4m

Blinq Networks, a Canada-based wireless equipment company, has raised \$7.4m for its series A round after acquiring assets from local peer Nortel Networks. It also hired Carleton Miller as its executive president.

The funding round was provided by venture capital firms New Venture Partners, which specialises in intellectual property-related spin-outs, Summerhill Venture Partners, which spun out from local phone operator Bell Canada in 2007, and the Business Development Bank of Canada through its BDC Venture Capital unit.

Miller was president of Andrew Corporation's Wireless Network Solutions.

Moncrieff raised

Alison Moncrieff has become vice-president of new business development at the Lifestyle Incubator of Netherlands-based electronics company Philips's Consumer Lifestyle subsidiary. She was previously a vice-president of skincare in the group after nearly two years as head of strategy.

Incubator move

US healthcare company Johnson & Johnson and Merck have taken space at Pittsburgh Life Science Greenhouse, an incubator and workspace that has helped to create or retain more than 5,000 jobs in the region since its inception in 2001.

Q&A with Transcosmos Investments

Shin Nagakura, head of Transcosmos Investments since 2003, talks to James Mawson about the company's corporate venturing strategy

Mawson: How long has Transcosmos been active in corporate venturing?

Nagakura: The company has been doing internet deals since 1995.

Mawson: Why?

Nagakura: Transcosmos is a public company in Tokyo, 40 years old but where the family still owns a majority, 53%.

The founder [Koki Okuda] is 75 and does not use emails, but his son is president and 43. When the son [Masataka Okuda] was younger he knew he would take over the company and wanted to do something different with it.

He was in Silicon Valley from 1993 to 1994 and saw the birth of the internet and became obsessed in it as art rather than business. With Real Networks he realised internet devices could be credible TVs and radios.

It was too early, but fortunately he is the son of a rich guy who runs the company so he flew to Seattle from the Valley and met Real Networks and offered to sell its services in Japan. He did very well out of the deal as an \$8m investment before Real's initial public offering became worth \$500m to \$1bn on paper.

He had a good idea at the right time and a good sense of the future. This one shot gave a good idea of what the internet could become, so the internet became not a toy but the future of Transcosmos and the company started heavy investment in 1997, and, unlike other companies, with an analytical approach. Transcosmos was aggressive, which is a competitive advantage over other Japanese companies.

Transcosmos sold half its shares in Real at good levels and the rest in 2002 and 2003 after the implosion.

Mawson: What has been your worst investment?

Nagakura: Ask. Transcosmos set up Ask Japan and invested nearly \$100m over five years before shutting it down last year with not even a 1% market share.

Mawson: How much has Transcosmos invested in aggregate?

Nagakura: About \$500m in 120 deals, such as CyberSource, where we owned 4.9% and Visa bought it. The investment team is me and three senior people plus 10 in the US and 20 in Japan, but almost all our deals have been in the US. We were very defensive between 2007 and 2009 with no new investments, although we retained the portfolio. Zynga bought one of our Japanese companies and paid in its stock.

Mawson: What has such corporate venturing meant for Transcosmos?

Nagakura: The internet makes up about 30% of our revenues, or \$1.75bn, with earnings before interest, tax, depreciation and amortisation of 10%. We do outsourcing and call centres and internet advertising, such as DoubleClick. We have the largest web creation team, NetRatings, in which Nielsen owns 40%, and Coremetrics, where Transcosmos is the reseller even after IBM bought it.

Mawson: What is the future?

Nagakura: We started to do deals again this year and in the next 12 months will look to complete three, plus two bolt-ons to existing portfolios. As a family-run company we have more freedom. If they like it, it is a done deal. We typically invest \$1m to \$10m. Japanese companies are more interested in corporate venturing where enterprises are run by the owner.

Fact box

Year	Deals	Exits
1996	6	2
1997	1	0
1998	7	2
1999	55	15
2000	55	6
2001	–	2
2002	–	0
2003	1	2
2004	2	1
2005	8	0
2006	7	0
2007	3	2
2008	1	1
2009	0	2
2010	1	3

COMPANIES

Seed/early

Become.com
Pheedo
Donnerwood Media
Hipcast (Audioblog)
Buzznet
Multiply – sold to Naspers/
MIH September 2010
Revcube
edgeio
SingShot Media – sold to
Electronic Arts February
2007
WangYou
Skysoft
6rooms – sold to founder
July 2010
Buzzlogic

Mid-stage

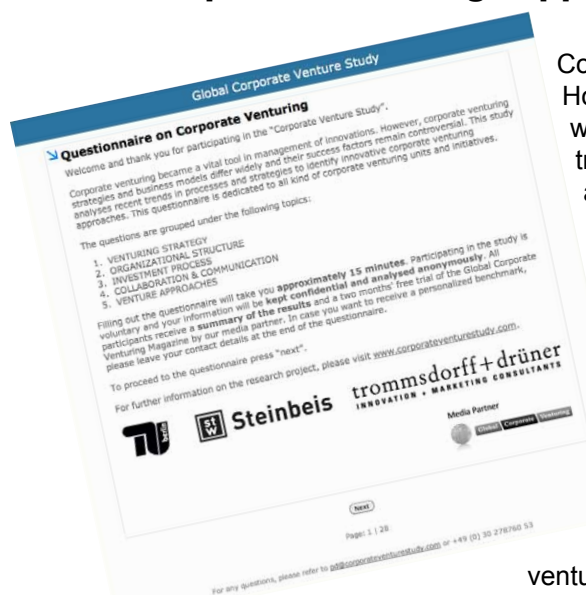
InfoGate – sold to AOL
Hipbone – sold to Kana
Optimost – sold to Interwo-
ven 2007 (now Autonomy)
Brightcove
Eurekster
Zazzle
Zynga

Late stage

Loudeye
CinemaNow – sold to Sonic
Solutions November 2008
Coremetrics – sold to IBM
August 2010

Scientific study on new success factors in strategic corporate venturing

Global Corporate Venturing-supported survey



Corporate venturing has become a vital tool for managing innovations. However, corporate venturing strategies and business models differ widely and their success factors still remain controversial. Innovation trends such as openness and collaboration create new opportunities and make corporate venturing approaches more heterogeneous. Following Henry Chesbrough's open innovation paradigm, some corporate venturing units recently opened up their processes and further fostered internal and external collaboration to leverage the impact of their operations.

The study aims at identifying new success factors for strategic corporate venturing units by researching and evaluating recent trends in processes and strategies. In particular, the survey focuses on investment strategy, decision making processes, the measurement of strategic success and internal and external collaboration and communication.

In this context the study presents cases of innovative corporate venture capital and open innovation hybrids, and tries to understand the participants' attitude to the topic. The study is conducted by the Berlin Institute of Technology and Steinbeis University Berlin in co-operation with the Berlin-based innovation consultancy Trommsdorff & Drüner, and with Global Corporate Venturing as media partner.

The research team is still looking for respondents for their current online survey. In order to participate please click on the following link: www.internet-interview.com/cvc/

All respondents receive a summary of the results and can have a two months' free trial of Global Corporate Venturing. Later on, the results will be published in Global Corporate Venturing.

For further information on the study please visit www.corporateventurestudy.com or contact Philipp Dauderstädt at pd@corporateventurestudy.com or James Mawson at jmawson@globalcorporateventuring.com

To advertise job vacancies, special notices and events in this section, contact James Mawson on +44 (0) 7971 655590 or email jmawson@globalcorporateventuring.com

Job wanted

Senior Management PA / Office Manager for Global Business News Media Group seeking to work within a financial / legal organisation providing personal assistance to senior management / partner. Alternatively I would be interested in providing office management within a department.

I have had previous experience working in similar roles within a law firm, a wealth management firm and a non-for-profit organisation all based in London. I have a BA (Hons) Business Studies with Law degree and am extremely proficient in using Outlook, Word, Excel and PowerPoint.

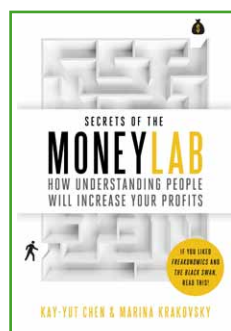
I am a team player, have great interpersonal and organisational skills and thrive in a busy environment.

I am available to start work subject to notice. To request a CV or for all other enquiries, please contact me on: 07930 761167 or send an email to nazinna.douglas@aol.com

Events

US National Venture Capital Association annual meeting: April 6-7, Boston, US. Coinciding with the 65th anniversary of venture capital and the 150th anniversary of the Massachusetts Institute of Technology and will be held in Boston. annualmeeting.nvca.org. The NVCA, Xconomy and the MIT Museum will host a special programme featuring several success stories that have resulted from collaboration between leading research institutions and VCs.

GIL 2011: May 17-18, London. Frost & Sullivan, in association with Global Corporate Venturing for the second year, will host the global community of growth, innovation and leadership at Arsenal Football Club's Emirates stadium. Global Corporate Venturing and its partners will also host its inaugural corporate venturing awards ceremony. www.gil-global.com/europe and www.globalcorporateventuring.com. Email: jmawson@globalcorporateventuring.com



Sensational books like Freakonomics, Nudge and Predictably Irrational have introduced behavioural economics to the world, and shown us that human behaviour follows predictable patterns. But how do you take these radical ideas and apply them to your business? How do you make money from them?

Kay-Yut Chen started the first experimental economics laboratory inside a corporation at Hewlett-Packard to answer exactly these questions, and to explain why people really do the things they do.

He packs **Secrets of the Moneylab** with insights into the invisible forces controlling the world of business, including the desire for fairness, the power of reputation, and the human knack for playing the system.

These findings, which often defy conventional wisdom and traditional economic theory, will help you engineer your business for success.

Kay-Yut Chen leads HP's experimental economic laboratory – the first such lab at any company. His research has featured in Newsweek, Financial Times, and The Wall Street Journal. **Marina Krakovsky** is a journalist who writes about science and business. Her credits include The Washington Post and The New York Times.

Portfolio Penguin, £14.99, 9780670919444

Chasing the rabbit: deal origination best practice

Would you invest in a company that sold only to one out of 80 leads? In fact, you have already made that investment – in your corporate venture group. According to our data, the median private equity and venture capital investor in private companies reviews more than 80 opportunities in order to make a single investment. The median fund required 3.1 investment team members to close one transaction in one year (see graph).

Private equity origination is an inefficient and labour-intensive process, even though an effective deal origination process is fundamental to successful investing. Private equity funds that employ a proactive origination strategy have consistently higher returns, driven by both greater quantity and higher relevance of incoming investment opportunities.

We recently completed the first study of best practices in how private equity and venture capital funds originate new investments, published in full in the winter 2010 *Journal of Private Equity*. We drew on our personal work experience

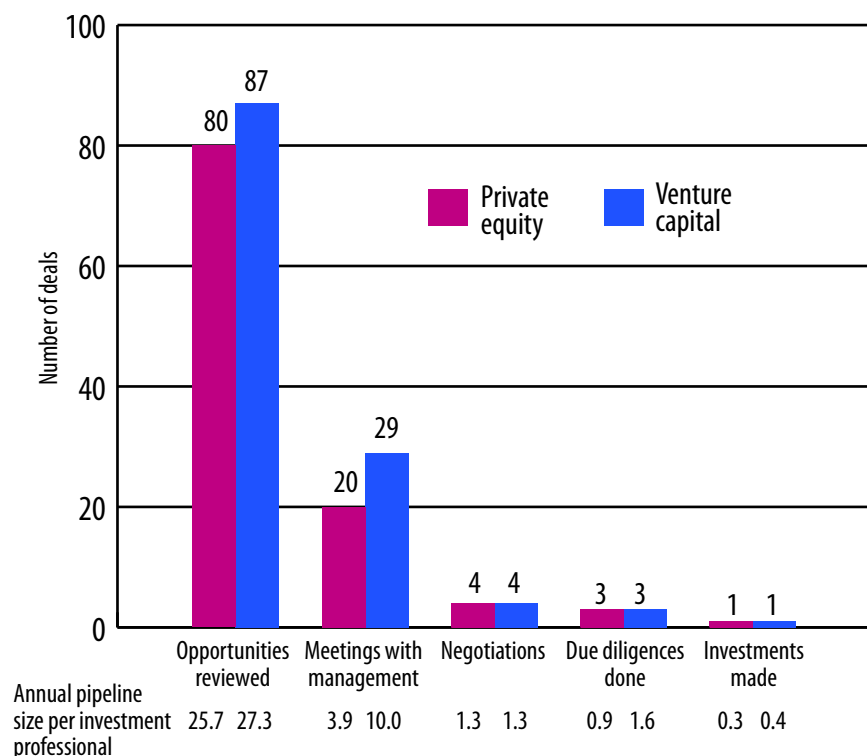
David Teten, chief executive, Teten Advisors, right, with Chris Farmer, venture partner, General Catalyst Partners



with leading institutional investors, in-depth interviews with more than 150 funds globally, and our proprietary dataset of their origination practices. Our focus was institutional investors in private companies – primarily independent funds, but also corporate-affiliated groups.

Based on our study, we have identified five recommendations to improve the volume and relevance of dealflow.

Median pipeline size necessary to close one deal



1 Build a specialised outbound origination programme. Growth investors with dedicated, large-scale sourcing teams are almost all top-quartile performers across stage, vintage, and sector. The largest practitioners of these programmes – including Battery Ventures, Great Hill Partners, Insight Venture Partners, Platinum Equity, Summit Partners, TA Associates and TCV – typically have between 0.75 and 1.25 dedicated deal sourcers for every generalist investment professional. Riverside Company, a mid-market private equity firm, has developed a broad network of 24 senior, focused deal originators to produce top-quartile results in eight of their last nine funds. While some question whether these strategies are as effective in Europe given the market and cultural fragmentation, firms such as TA and Summit have found their European launches to be very successful – matching or beating the efficacy found in the US. ►

2 Create opportunities, instead of waiting for opportunities to appear. A number of corporate-affiliated funds commented that they were the only entities within their firm focused on investing. Unsurprisingly most of their colleagues across the company are too busy doing their respective day jobs to provide as much dealflow as they theoretically could. In response, the top performers invested significant energy in educating relevant individuals across the firm (for example division managers and business development specialists) on their needs and interests. Where possible, they tried to find a way to arrange internal rewards or at least recognition for colleagues within the firm who helped source deals.

Kuk Yi, corporate vice-president of Best Buy and managing partner of Best Buy Capital, the investment group for Best Buy, said: "Our networks with the venture capital community and entrepreneurs are our most important deal sources, with 40% of flow. Another 40% is from our internal corporate network. Another 10% is from investment bankers, and 10% is random – for example a student mailed our chief executive (CEO) about an opportunity. We get higher quantity but lower quality from a typical internal source, because they are usually too narrow a fit – a company with an interesting product but not a good investment. We co-invest 60% to 75% of the time, which helps build relationships and credibility with the VC community."

A number of the funds we studied use an origination approach that allows them proactively to co-create companies or opportunities. Frontenac Company uses a "CEO first" strategy, partnering "deal executives" to source investments in these executives' focus industries. Exigen Capital specialises in creating independent carve-out businesses by pulling out an existing cost centre from an industry leader – including people, processes and systems.

3 Use deal signals to look for targets which are both attractive investments and are likely to welcome an outside investor.

In order to filter the universe of companies, some investors specifically reach out to companies flashing "deal signals". These investors are exploiting the wealth of information about private companies available online, increasingly leaked via social media.

For example, Aliisa Rosenthal, director of strategic partnerships, Quid, reports that her research firm uses an increase in internet traffic as a sign of customer traction at an internet start-up. Similarly, Quid tracks Twitter traffic about a start-up to gauge customer opinion. Teten Advisors is now building an automated platform for private equity funds to source new transactions based on these signals. For example, the firm will identify a private company whose CEO is getting older and who lacks a logical heir – such a person is likely to be receptive to an investor's inquiry.

4 Leverage social media. Historically, institutional investors kept their investment strategies discreet. However, today about 10% to 15% of the 1,000 active venture capi-

talists blog, according to Jeff Busgang, general partner, Flybridge Capital Partners. Although private equity funds have been slow to take up social media, some have been more aggressive. For example, lower-mid-market private equity fund MCM Capital saw a 150% increase in dealflow after they launched a social media campaign.

5 Leverage your unique strengths as a corporate entity. As such an entity, you bring assets to the table that a conventional investor lacks, and these should be leveraged heavily. For example, you typically have deep intelligence in your industry and influence. You may particularly have insight on low-cost international sourcing options for manufacturing, which is typically hard for a small company to build. Emphasise these strengths in your marketing and your meetings.

Many potential investees had concerns about taking in capital from a strategic investor, for example about information leaking or being used against them in future negotiations. Another significant concern was internal bureaucracy slowing down decision-making when compared with the speed of independent venture capital groups. These can be mitigated by structuring the corporate venturing group to be as independent as possible, for example separate brand name and physical office, and imposing strict information firewalls. ■

More data on this research project can be found at teten.com/deals and at www.teten.com/executive

The authors

David Teten is CEO of Teten Advisors (teten.com), an investment bank that uses a proprietary technology platform to source transactions for private equity funds. He formerly was founder and CEO of Evalueserve Circle of Experts. He has started three companies, sold two, and is a former Bear Stearns investment banker and Harvard MBA. He is the lead author of *The Virtual Handshake: Opening Doors and Closing Deals Online* (thevirtualhandshake.com). Email: dteten@teten.com

Chris Farmer is a venture partner with General Catalyst Partners (www.generalcatalyst.com), a leading venture capital fund based in Cambridge, Massachusetts. He is also founder and chairman of Ignition Search Partners (ignitionsearchpartners.com), a boutique executive search and talent advisory firm based in San Francisco. Email: cfarmer@generalcatalyst.com

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The growth of optimism

Four decades after corporations developed a model of taking minority stakes in third parties to help their innovation programmes, the main discussion point at the 13th Annual Corporate Venturing and Innovation Partnering conference last month concerned how to integrate these investments into a wider business unit covering incubation and partnerships.

The discussions were against a backdrop of unprecedented optimism among International Business Forum's delegates about the role corporate venturing could have in supporting entrepreneurs and complementing other investor types.

Phil Giesler, partner at consumer goods companies Unilever and Pepsico-backed Physic Ventures and current chairman of the corporate venturing group at US trade body the National Venture Capital Association, said: "Corporations recognise this is the decade of growth rather than the past decade's era of efficiency and are increasing their attention to corporate venturing."

"This is leading to three trends. First, corporations are trying to provide value-added services in incubating ideas, innovation more broadly and partnerships between companies.

"Second, talent. Venture capital [VCs] firms are likely to be reducing their staff numbers while corporate venturing units are increasing theirs, but as they do not necessarily have the skills inside to build a group they are looking to hire talented people from VCs.

"Third, globalisation. Venture capital is most successful when it is local, but corporations act on a global basis and can work with financial VCs to invest in companies worldwide."

This optimism has encouraged Brad McManus, part of Japan-based electronics group Panasonic's corporate venturing unit and a director of the Strategic Venture Association, to say



Conference venue:
the Hyatt Regency
Newport Beach hotel

the trade body would be looking to expand its geographic focus from California to encompass a wider scope of business development by corporations.

Not only corporations recognise the importance of innovation to their future – countries do so as well.

Aneesh Chopra, US President Barack Obama's chief technology officer and associate director of the US Office

of Science and Technology Policy, said the US must "out-innovate" and "out-educate" its chief global competitors by building a digital infrastructure and changing the rules to encourage innovation. (Click for interview by Global Corporate Venturing at the conference: www.youtube.com/watch?v=SvEtim55JvY&feature=player_embedded)

In addition, Chopra encouraged the adoption of immigration reforms that would make it easier for top foreign technology students to enrol in leading US universities and stay in the country after graduation.

"We want to make sure that the best and the brightest have the opportunity to study here and stay here to help create jobs for the American people," Chopra said.

When asked about ►

We are now looking out of the abyss after I woke up last year and saw it wasn't a nightmare after all.

Robert Ackerman, Allegis Capital

The interest in this area is growing so fast. Firms are curious, incentivised by the challenges of growth and more willing than ever to try new models to build new businesses.

Phil Giesler, Physic Ventures

Innovation is not about new products but about new strategies on customer experience, business models, marketing strategies and distribution channels.

Corporations are just beginning to realise what innovation really means.

Jennifer Jones, Jennifer Jones & Partners

It was rewarding to see such a large and diverse group of people who are passionate about innovation and willing to openly engage with their peers in a conversation on the topic.

Reese Schroeder, Motorola Solutions Venture Capital

international technology collaboration, even though it wants to out-innovate, out-compete and out-build its rivals, Chopra said the US was already engaging with Russia on text messaging for mothers, had open-government dialogues with India on education planned for April and a memorandum of understanding on information technology collaboration with the EU to share medical files.

Chopra added that America must make permanent the research and development (R&D) tax credit, "get our patent policy in order", and promote entrepreneurship more aggressively. "We want to make sure we don't eat our seed corn before we plant it," Chopra said.

However, R&D by itself does little to encourage innovation even though more than \$1 trillion is spent on R&D each year, according to Barry Jaruszelski, management consultant at Booz.

He said only three of the biggest 10 spenders on R&D were rated the most innovative by R&D executives, while the 1,000 biggest companies invested \$505bn on research.

Larry Keeley, partner at consultancy firm Doblin, said his research of 10,000 innovation partnerships over the past decade found 70% failed and fewer than 200 made money.

He said the ones that did work followed a common pattern – they had six or more of the 10 types of innovation and concentrated on building platforms rather than products (see graph).

He said consumer electronics company Apple's iPhone had 425,750 applications available, which would cost someone \$664,170 to buy and need more than one iPhone to host them all.

But Keeley warned:

Having soaked in the lessons of venture capital through a couple of business cycles, I feel like we are now seeing the start of a golden age of corporate venturing with big companies investing in internal and external innovation at all stages with skill and patience and real understanding of how to bring value to ventures.

Rob Rosenberg, New Venture Partners

Venture capitalists would be surprised how many corporate venturing units are being started and how much activity and confidence there is in this area.

Gerald Brady, Silicon Valley Bank

There was evidence at the conference of the sheer energy behind the changing nature of the conversations and cross-industry business collaborations being discussed. This is something we have not seen before at this level and with this intensity and suggests a new brand of innovation partnering is coming.

Heidi Mason, Bell-Mason Group

"When platforms trump products, ecosystems trump firms. The definition of a platform is an integrated offering that creates a unique and holistic customer experience only loosely controlled by the platform owner. It is usually supported by proprietary technologies and typically characterised by interdependent products and services provided through a network of business partners."

In an opening presentation, Andrew Gaule, founder of consultancy firm H-I Network, said there were five phases for building open innovation – strategy, developing ideas, creating an entrepreneurial venture, partnering and scaling inside the core business.

A survey by H-I and IBF of delegates found the most significant stress

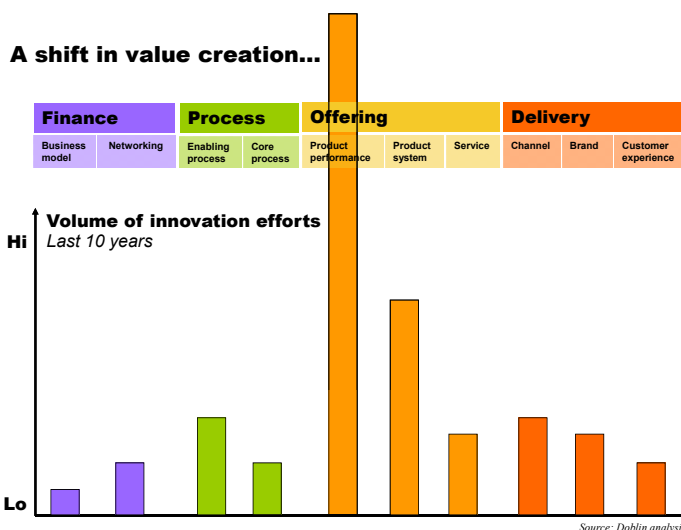
points when setting an open innovation strategy was the attitude to risk inside the company and defining its focus even as the market changed. The stress points in developing ideas were around prioritising efforts and demands alongside existing businesses and the incompatibility of the larger company's expectations to the start-up's operation.

For creating a new venture, Gaule's survey found there was a lack of entrepreneurial and experienced management teams – a similar problem when it came to innovation

partnering as the main challenge was finding the right stakeholders and managing their expectations.

But even when a venture was built to a nascent stage ready for corporations to roll it out, the survey showed there was still a focus on business as usual and measuring outcomes. ■

Global Corporate Venturing editor James Mawson is a conference advisory board member.



Innovative regions: Chile • • •

Leading the continent

If a country's interest in innovation can be gauged by the ease of finding out its programmes and venturing ecosystem then Chile would be near the top of the world.

The country certainly has high hopes. As Juan Fontaine, Chile's Minister of Economy, put it: "Instead of changing the world through revolution, we can change the world through innovation."

Chile has provided \$350m of subsidies to the estimated 10 venture capital funds, five angel networks and more than 20 incubators and established a Start-Up Chile organisation to provide subsidies for entrepreneurs to set up in the country.

Last year's Start-Up pilot brought 25 teams from outside Chile and provided them each with a \$40,000 subsidy (no equity) to participate for six months, and a temporary, one-year visa to develop their projects.

This year, it is aiming for about 300 participants, with 1,000 entrepreneurs participating by the end of 2014, which is the deadline President Sebastian Piñera Echeñique has set to create 100,000 new businesses and 800,000 jobs.

Vivek Wadhwa, director of research at the Center for Entrepreneurship and Research Commercialization at Duke University, writing about the pilot for news provider TechCrunch, said: "All of the teams that I met raved about the opportunities they had gained by being in Chile."

"They told me they have gained valuable time to perfect their technologies before having to raise capital from angels or VCs, that they had found Santiago to be a really cheap place to live, and that they benefit by being able to network with each other, are appreciative of the support the Chilean government is providing by connecting them to local businesses and investors, and enjoy the high quality of life and wonderful scenery and climate."

However, rather than build Chile into a peer to the US's venture capital centre in California, Start-Up Chile said: "Many people think we want to replicate Silicon Valley – we don't. What we want is to connect Chile to all the major hubs of innovation, and leverage [these] networks to create value. We strongly believe that human capital is the best highway to build upon."

"At the same time, infrastructure is the sandbox where

Key indicators 2009

Population: 17 million

Gross domestic product: \$161.8bn

GDP per capita: \$9,525

Source: World Economic Forum

human capital can play, and Chile is by far the best equipped country in Latin America. Think of Chile not as the final market but as a bootstrap platform before going global."

To this end, Chile has more mobile phone users than its population, although only about half its population of 17 million people has access to the internet.

Non-profit organisation World Economic Forum ranked Chile at number 30, the most competitive country in Latin America and the Caribbean, according to its Global Competitiveness Report for 2010 to 2011.

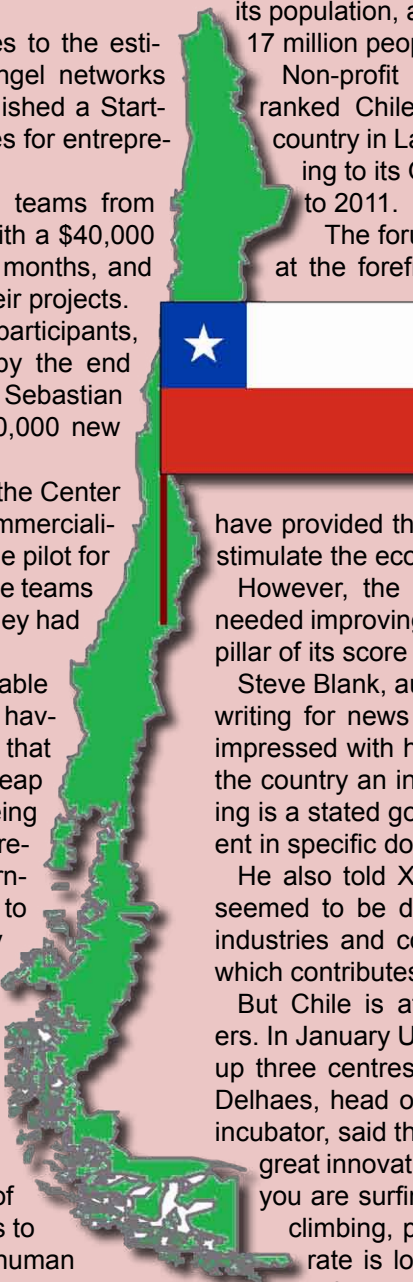
The forum's report said: "The country has been at the forefront of market liberalisation and opening, resulting in very efficient goods and labour markets (28th and 44th, respectively), one of the most sophisticated financial markets (41st), and the largest pension industry in the region. These attributes have not only spurred growth over the past 20 years, but also have provided the country with the resources needed to stimulate the economy in recent times of crisis."

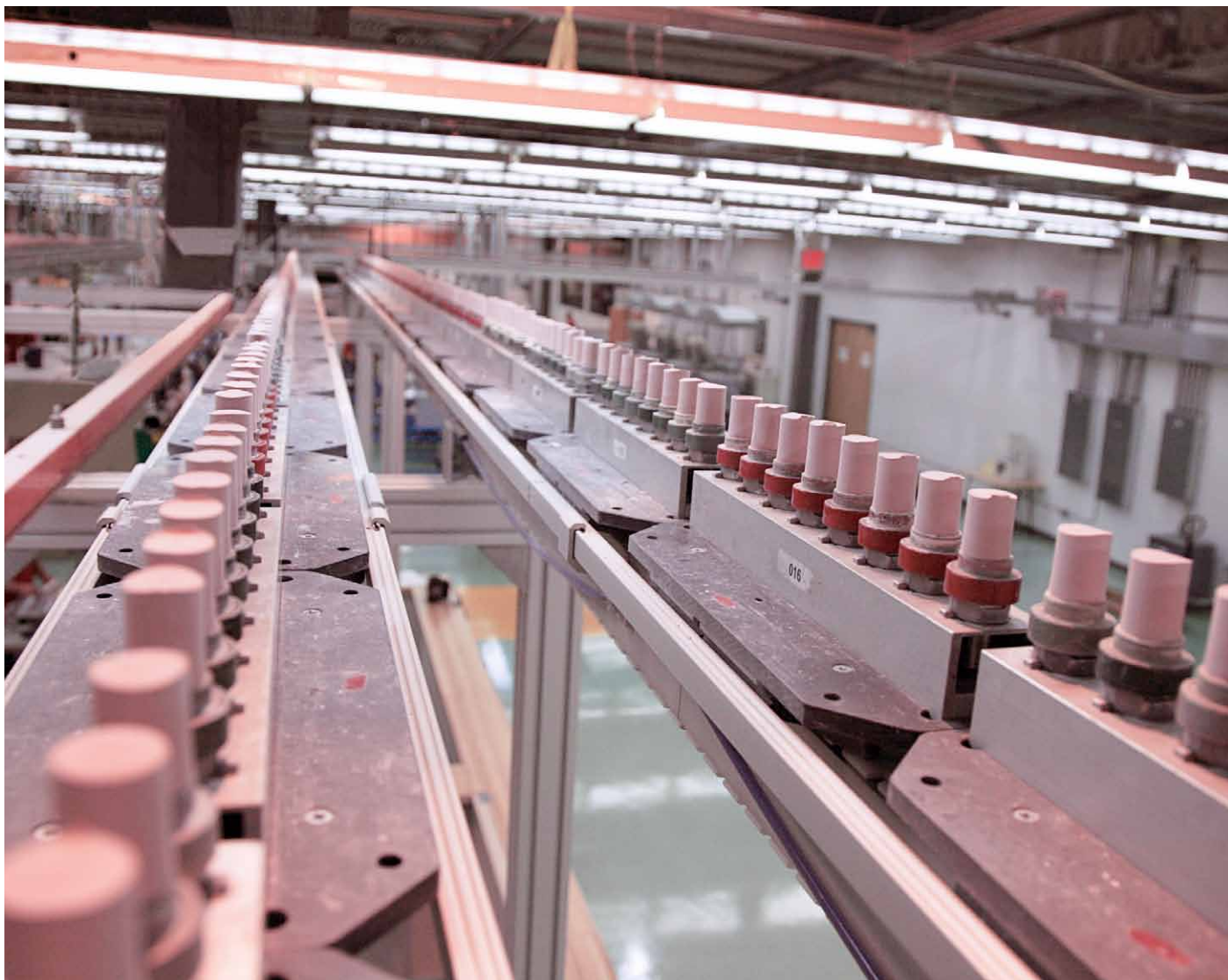
However, the forum said Chile's education systems needed improving and so the country ranked 43rd for this pillar of its score card.

Steve Blank, author of the *Four Steps to the Epiphany*, writing for news provider Xconomy, said while he was impressed with how far Chile had progressed in making the country an innovation hub, "what seems to be missing is a stated goal for Chile to become a magnet for talent in specific domains".

He also told Xconomy that entrepreneurship in Chile seemed to be disconnected from the country's largest industries and core resources, such as copper mining, which contributes 20% of gross domestic product.

But Chile is attracting attention from service providers. In January US-based incubator Founder Institute set up three centres in Latin America, including Chile. Tim Delhaes, head of US-based Founder Institute's Chilean incubator, said the country and its capital, Santiago, "is a great innovation region because in less the two hours you are surfing, sailing, kiting, horse-back riding, ice climbing, paragliding, you name it; the hard crime rate is low; it has a Duracell economy, it keeps going and going and going; and Chileans treat foreigners better than they treat each other."





The power of imagination

We all need to be “imagineers” now and there appears to be no more pressing demand for their talents than in the industrial sector, at least judging by the number of corporate venturing units in some of the industry’s largest companies.

Ja-kyun Koo, chief executive and vice-chairman of South Korea-based LS Industrial Systems, said “imagineer” was a compound word merging imagine and engineer.

He told 135 people joining LS in December: “In this era, students majoring in humanities can survive only when they understand technology, and engineering students can survive and thrive only when they learn the humanities as well. To that end, I urge you to become imagineers who create completely new things by integrating different areas.”

Industrial groups have taken the advice on board with their breadth of innovation strategies, from research and development, incubation, open innovation competitions, corporate venturing and partnering, licensing, and mergers and acquisitions across a wide range of sectors.

France-based defence group Thales invests 20% of its consolidated revenues (€2.5/\$3.5bn in 2009) in research and development. Its more than 25,000 researchers and engineers develop 300 inventions each year and the company has a portfolio of 11,000 patents and more than 30 cooperation agreements with universities and public research laboratories in Europe, the US and Asia.

Its Thales Corporate Ventures unit, however, has been more quiescent. The unit posted a fair value of €17.2m in Thales results for last year, which was only €200,000 ►

more than the same period a year earlier, although in January it did take 20% of MultiX, a maker of x-ray machines for airport security. Jacques Doremus and Patrick Radisson, both from the Thales Group, founded MultiX in October with the support of the French Commissariat à l'Energie Atomique.

Other groups have also reinvigorated or launched their corporate venturing programmes in the past year, including oil services company Schlumberger, which invested Nkr10m (\$1.8m) in cable monitoring company WireScan in December, India-based conglomerate Aditya Birla, which set up its Capital Advisors Private division for venture capital and private equity funds, and France-based chemicals company Rhodia, which backed flexible solar panels maker Eight19's seed round and committed to a second fund managed by independent venture capital firm Aster Capital.

Aster was formed last year through the merger of local industrial companies Schneider Electric and Alstom's corporate venturing units and follows a well-established tradition of industrial groups forming some of the most successful independent venture capital teams.

In the late 1990s, the Swiss Federal Institute of Technology in Zurich (ETH Zurich) and consultancy firm McKinsey had 10 companies, including local conglomerate Sulzer, to back the launch of Venture Incubator.

In 2001, oil major Royal Dutch Shell, fuel cell-maker Ballard Power Sys- ►

Most influential industrials

Company	Head office	CV name	Formed	Funds
General Electric	US	GE Capital, Equity	1995	\$4bn
Siemens	Germany	GE Energy Financial Services		
		Siemens Venture Capital		
		Siemens Technology Accelerator		
		Siemens Medical Ventures		
		Siemens Global Innovation Partners*		
BASF	Germany	BASF Venture Capital		
Dow Chemical	US	Dow Venture Capital	1993	\$350m
DSM	Netherlands	DSM Venturing	2001	€200m
		Limburg Venture*	2004	€15m
Doosan	Korea	Neoplux	2000	KrW230bn
Sumitomo	Japan	Presidio Ventures	1998	\$200m
Reliance ADA Group	India	Reliance Venture	2006	
Aditya Birla Group	India	Aditya Birla Capital Advisors Private	2010	R8.8bn
ABB	Switzerland	ABB Technology Ventures	2009	
Du Pont	US	DuPont Ventures		
Robert Bosch	Germany	Robert Bosch Venture Capital		
De Beers	UK	E6 Ventures	2008	
3M	US	3M New Ventures	2008	
		MAMA Sustainable Incubation	2010	
Hanwha	Korea		2006	
Postech and Rist	Korea	Postech Venture Capital Co	1997	KW60bn
Posco	S Korea	POSCO BioVentures	2002	\$50m
Aju Group	Korea	AJU IB Investment	1974	
Tata	India	Tata Capital		
		Innovation Fund	2011	
		Growth Fund		
		Healthcare Fund		
Battelle	US	Battelle Ventures		\$220m
		Innovation Valley Partners – a limited partner		\$35m
Godrej Group	India	Omnivore Capital	2010	\$50m
Solvay	Belgium	Future Businesses	2010	
Schneider Electric	France	Aster Capital*	2000	€90m
Alstom	France	Aster Capital*	2010	€30m
Rhodia	France	Aster Capital*	2011	€15m
Stora Enso	Sweden	Stora Enso New Business Creation	2007	
		Stora Enso Ventures	2005	
VKR	Denmark	VKR Growthcapital		
Saint-Gobain	France	NOVA External Venturing	2006	
Nypro	US	New Ventures Group	2009	
IDB Group	Israel	Koor Corporate Venture Capital	2000	
Mitsubishi	Japan	Mitsubishi Technology & Business Development Department	1987	
Remgro	South Africa	InVenFin Venture Capital	2008	R50m
Koch Industries	US	corporate development		
Johnson Matthey	UK	Conduit Ventures*	2002	\$100m
Northrop Grumman	US	Northrop Grumman Cync Program		
DCNS	France	Marine Renewable Energy Incubator		
Lockheed Martin Corporation	US	corporate development		
Thales	France	Thales Corporate Ventures	1984	
EnGro	Singapore	Juniper Capital Ventures	1990	
Schlumberger	US	Innovation Capital	2010	
Ballard Power Systems	Canada	Chrysalix Energy*	2002	
Aucksun Metal	China	Dingshun Venture Capital	2009	
Laing O'Rourke	UK	corporate development	2011	
Lafarge	France	corporate development		
AkzoNobel	Netherlands	Innovation		
Umicore	Belgium	Imagine		
Gilkes	UK	corporate development		
Asahi Kasei	Japan	corporate development	2006	
Asahi Glass	Japan	corporate development		
BAE Systems	UK	BAE Systems Ventures	2002	
Eastman Chemical	US	Eastman Ventures	2003	
Bekaert	Belgium	Bekaert Technology		€4m per year
Rolls-Royce	UK	corporate development	1980s	
Saab	Sweden	Saab Ventures	2001	
Sulzer	Switzerland	Sulzer Innotec		
Freudenberg Group	Germany	Freudenberg Venture Capital	2001	
Evonik	Germany	Creavis Technology & Innovation	1998	15% of R&D budget
Grunfos	Denmark	Grunfos New Business		
Mahindra & Mahindra	India	M&M Capital	2008	\$50m
BK Modi Group	India	Spice Capital	2009	\$150m
Votorantim	Brazil	Votorantim Novos Negócios	2008	

*Limited partner in independent fund
Source: Global Corporate Venturing



Jewellery and technology drive demand for gold

The biggest sources of demand for gold are for jewellery and as an investment, but with more than 4,000 academic papers filed last year using the precious metal as a component, technology offers mining companies a way to use industrial innovation to promote sales.

To encourage research, the World Gold Council (WGC), the industry's UK-based market development body, is investing to help promising research bridge the gap between university and the laboratory and money from venture capital firms and multinational companies.

Its first equity investment is in Nanostellar, a US-based company working on limiting emissions from diesel vehicles, also backed by venture capital firms Firelake Capital Management, Khosla Ventures and Monitor Ventures, which is affiliated to consultancy firm Monitor. Nanostellar last raised \$2.4m from 16 investors, accord-



ing to its regulatory filing.

Richard Holliday, director of technology at the WGC, said: "There is an increasing focus and momentum by the WGC on supporting technology and accelerating the commercialisation process in a way

that is closer to corporate venturing than traditional financial venture capital."

The WGC invests money, knowledge of gold research and a supply of the metal to universities, start-ups and multinationals' laboratories working on medical applications, environmental control and renewable energy projects. Last month, the WGC formed an advisory board and published a report, *Gold: The hidden element in innovation*.

The WGC said the number of papers filed with gold as a component had doubled between 2006 and 2010 while the number of patents published had broadly trebled in the same time.

Its International Technology Advisory Board includes Barry Murrer, director of the technology centre at industrial group Johnson Matthey, and academics Enrique Iglesia, T Pradeep and Vincent Rotello.

Last year, gold demand reached a 10-year high of 3,812.2 tonnes (\$150bn), driven primarily by purchases by Indian and Chinese consumers for jewellery, while 420 tonnes was used for technology (a 12% rise from 2009).

Supply continued to outstrip demand, however, as mines produced more and the amount of recycled gold held broadly steady.

where many of the technologies rely on so-called rare earths or precious metals.

Barry Murrer, director of the technology centre at Johnson Matthey, is on the advisory board of the market group World Gold Council's unit that is encouraging industrial use of the metal (see box).

Meanwhile, diamond supplier De Beers has used its corporate venturing unit Element 6 Ventures to tap into the use of synthetic diamonds and other super-materials in industrial processes.

Industrial innovation is often a process of efficiency improvements to save costs and boost margins or retain sales but the political and social impetus towards cutting emissions and reduce reliance on finite resources is spurring the trend.

US-listed industrial conglomerate General Electric (GE, see profile), ranked the most influential corporate venturing programme by Global Corporate Venturing, has saved billions of dollars by using innovation and in the past ►



tems and US-based Westcoast Energy started Chrysalix Energy, and the following year Shell, Japanese conglomerate Mitsubishi and UK-listed industrial group Johnson Matthey, launched Conduit Ventures with a \$100m fund to target early-stage opportunities in the fuel-cell sector.

Johnson Matthey has also partnered organisations that can help it gain a competitive advantage in clean-tech,



Synthetic diamonds, being investigated by the corporate venturing unit of De Beers

18 months has set up three dedicated corporate venturing funds across clean-tech, energy and healthcare to allow the company to be more proactive with entrepreneurs and venture capital firms.

Though GE has financial targets, the group is using venturing to help the company's strategy. Other companies, such as Dow Chemical (*see profile*), have moved towards a more strategic than financial goal, while Netherlands-based DSM in December promoted Marcel Lubben from handling licensing to a broader role including DSM Venturing, which takes minority equity stakes in third parties.

And career development has led peers to move from

corporate venturing to closer management of business units and carved-out companies.

In December, Matthias Baum moved after nine years at Germany-based chemicals company BASF the project team carving out Styrolution, while Alexander Rietz left local conglomerate Siemens Venture Capital after five years to be a business manager at Desertec Industrial Initiative.

While other industries, such as pharmaceuticals and information technology, have grasped more public attention for their innovation and corporate venturing programmes, the industrial sector has remained one of the most sophisticated. ■



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Profile: Dow Venture Capital

Old hand with new tricks

Chemistry underpinned the industrial revolution in the 19th century, but rather than become commoditised by the biological and information technology revolutions, the science has had a new lease of life and with it a rise in margins and sales.

The importance of the new technologies has resulted in a shift to a more strategic direction for Dow Chemical's corporate venturing unit, Dow Venture Capital, one of the world's oldest and most successful groups.

Dow Chemical posted a 26% jump in annual sales last year to \$54bn, excluding divestitures. Following its merger with Rohm and Hass, the company saw a significant rise in margins and profitability.

Last year, there was a two percentage point increase in earnings before interest, tax, depreciation and amortisation (ebitda) margins. A 14% increase in prices meant ebitda rose by 36% to \$7.5bn on a pro forma basis.

Given such results, Dow Venture Capital's money invested in portfolio companies since launching in 1993 has barely affected the company's balance sheet. Partly as a result, Dow is understood to have shifted the corporate venturing unit to looking solely at investments to accelerate its sponsor's strategy and deliver economic value.

One consequence of this shift has been a move away from indirect investing as a limited partner, or investor, in third parties' venture capital funds towards direct investing. Dow Venture Capital has at least 17 relationships with third-party fund managers – called general partners – including Emerald Technology Ventures in Switzerland and US-based CMEA Ventures.

In a presentation seen by Global Corporate Venturing, Dow said: "Financial risk management through broad investment diversification is not primary priority, and so we are less focused on

pursuing investment in venture capital funds. "We value all of our fund relationships, and look forward to continuing to connect on opportunities and deal flow of mutual interest."

Such mutual interests involve a formal programme for dealflow sharing, access for due diligence and being the first choice to co-lead investment opportunities, and having privileged access to technical and market knowledge.

With less interest in indirect funds, Dow Venture's "time and financial resources [are] now focused on sourcing, structuring and supporting direct investments". The company lists 24 direct investments on its website as

Fact box

Started: 1993

Key people

Managing director: Monty Bayer

Directors: Paul Morris, Chris Jones, Mike Rehberg, Kevin McElgunn, Richard Fuentes, Dennis Merens

a representative sample. These deals include its seed-stage investment in Plastic Logic, which uses organic rather than silicon-based semiconductors, tuberculosis diagnostics developer Oxford Immunotec and ZBD Displays, an electronic paper provider.

Although the company prefers to keep its total investment in a portfolio company across a series of rounds to less than \$25m, the strategic rationale behind corporate venturing allows the team, led by managing director Monty Bayer, flexibility to invest more.

In wake of the investment shift, Dow Venture Capital's more recent deals are directly in line with its sponsor's strategy to develop elements useful in clean-tech and sustainable sectors. Andrew Liveris, chief executive of Dow Chemical, was ICB's top power player in the chemical industry last year and has been quoted as saying the clean-tech energy sector would be worth more than \$2 trillion by 2020. Dow wants 10% of its sales to come from sustainably chemistry-based products by 2015 compared with 3.4% in 2009.

In its annual results published last month, Liveris said: "Dow is well positioned for the improving economic climate and will continue to benefit from growth in high-margin sectors, such as electronics and packaging, driven by innovative products and technologies, coupled with our expanding presence in emerging markets."

Recent examples of Dow's corporate venturing deals include Blade Dynamics for wind turbines, Clean Filtration Technologies and WaterHealth for treating and supplying water, solar panel producer NuvoSun, and Xtreme Power, a battery company. Investments such as NuvoSun are understood to fit well with Dow's Solar Solutions business unit, which already spends about \$50m a year on research and development on integrating photovoltaic panels into building products such as roof tiles.

However, Dow's business units range from those involved with advanced materials used in paints and coatings, glues and lubricants for engines, filters for water, crop sprays and food, to wire and building insulation.

That Dow operates in 35 countries and across a spread of business lines means closer integration between its seven-strong corporate venturing unit based in US and Switzerland is an extra challenge on top of dealing with existing portfolio companies and finding new investments. ■

Profile: General Electric

A powerful partner with wide range of interests

As the tagline for its own history of the company, US-listed industrial conglomerate General Electric (GE) says: "For over 130 years, we have continued to innovate what has yet to be imagined."

Despite the difficulty, if not impossibility, of producing something before it has been imagined, GE has nevertheless been a highly successful, innovative company with a sophisticated corporate venturing unit.

The company said it had invested in more than 1,000 third-party companies, including a reported \$4bn in 300 businesses between 1995 and 2000. However, the dot.com implosion after the millennium led to a re-evaluation of its strategy and a move to later-stage equity investing. GE is also one of the largest lenders to people and businesses through its GE Capital division.

By investing in later-stage portfolio companies, GE has been better able to link them to its business units – GE Energy, GE Global Research, GE Oil & Gas, GE Water and GE Capital. The company said: "We offer more than money. Our portfolio companies benefit from GE's extensive financial and manufacturing footprint in the energy and water industries, industry-leading corporate research and development, operational expertise, multi-country reach, and best-in-class due diligence."

For example, GE provided \$15m of the \$70m raised by US-based A123 Systems in April 2009 but, beyond providing capital, GE, through GE Global Research, provided system design expertise and supported the portfolio company's stationary power product development

GE Healthcare's QuietCare system – it learns the habits of elderly people and trips an alarm if the pattern changes



Fact box

Started: 1995

Assets under management: >\$5bn

Key people:

GE Capital, Equity – had both the Healthymagination and Peacock funds

Sherwood Dodge, president and chief executive

Bruce Ingram, funds leader

Patrick Kocsi, portfolio leader

Mike Fisher, investment leader

Rajan Gupta, senior vice-president

Rafael Torres, managing director

Hugh Golden, managing director

Jonathan Glass, managing director

Mark Chen, managing director, China

Hubert Esperon, managing director, UK

Gustavo Arnaiz, managing director, Latin America

Shin Kimura, vice-president

GE Energy Financial Services

Kevin Skillern, leader of venture capital

Ricardo Angel, senior vice-president

John Cote, vice-president, venture capital portfolio

Andrew Lackner, associate vice-president

Jerry Polacek, managing director

Trey Kellett, vice-president

for electric grid applications, and helped to design battery system components for its automotive programmes.

GE, a conglomerate that outsiders have occasionally said should be broken up, has also refined its venturing process as part of a wider programme of innovation, called Imagination. Its equity investments are primarily made by two divisions – GE Energy Financial Services and GE Capital, Equity.

GE Capital, Equity said it provided equity capital to mid-market sponsor and lending relationships and to companies with differentiated technology in GE's core industries.

GE Capital, Equity manages more than \$5bn in equity and indirect (fund) investments that can cover all its sectors, energy, oil and gas, healthcare, transportation and aviation, but includes a ►

specific \$250m corporate venturing fund for the healthcare sector. Healthymagination, set up in October 2009, has made one deal, a \$5m investment in heart device company CardioDX, although it had expected to do 10 deals a year.

The fund is part of a \$6bn programme by GE to boost healthy living. This programme includes \$700m for research and development and a medical device company, Intel-GE Care Innovations, formed last year as a joint venture with US-listed semiconductor maker Intel to invest \$250m over the next five years for research and product development of home-based health technologies.

Michael Jones, executive vice-president of business development at GE Healthcare, is a director of the Healthymagination fund, along with Sherwood Dodge, executive president at GE Capital, Equity.

At the time of the CardioDX deal, Jones said: "GE Capital, Equity and GE Healthcare have made a relatively large number of minority equity investments, either as part of a staged acquisition or for strategic relationships. Making the Healthymagination fund more formal was necessary because there are increasing opportunities and a need for GE to extend our innovation network and be outwardly focused. Previously our investments were reactive. This fund will be more proactive and venture-orientated and also have the GE global research centre involved for technology assessment and sourcing companies."

In July 2009, just before setting up Healthymagination, GE said it had become one of the founding members of a Japanese government-led initiative designed to accelerate the development of clean energy, environmental and healthcare technologies. GE is one of 16 corporations – and the only US-based company – that have each invested \$5.3m in equity in the Innovation Network Corporation of Japan, while the Japanese government invested \$872m and provided \$8.5bn in loan guarantees.

GE Capital, Equity, led by Sherwood Dodge, also managed a second, \$200m fund, called Peacock, for the media sector. The Peacock fund was managed as a joint venture in conjunction with broadcaster NBC Universal but has been transferred to cable company Comcast after it acquired NBC in January.

A similar partnership between GE and other companies has also funded a corporate venturing fund for the energy sector.

In January, GE, energy utility NRG Energy and oil major ConocoPhillips committed a combined \$300m to launch Energy Technology Ventures, a corporate venturing joint

venture to invest in about 30 early and growth-stage clean-tech companies over the next four years.

The Energy Technology joint venture is the first time NRG and ConocoPhillips have started a corporate venturing programme, whereas GE has been active in clean-tech corporate venturing through its \$22bn GE Energy division.

GE Energy primarily invests what is effectively project finance for wind farms and other power projects covering, such as oil and gas, power transmission and distribution and renewable energy as

well as about \$200m in 27 later-stage emerging energy and water-related technology companies through its venture investing group. GE said it made "equity investments in companies that pursue game-changing technologies and services throughout the energy and water value chain, from natural resources to clean tech".

GE usually invests up to \$5m per deal but can spend more, such as battery maker A123 Systems, in which GE invested an aggregate \$69.8m over seven rounds for more than 10% of the company ahead of its flotation.

The GE Energy division has also led corporate venturing investments out of a group-wide Ecomagination project to become more efficient as a company and invest in clean technology for future products and sales.

Each GE business unit has to generate four Ecomagination projects every year. Former GE adviser on innovation strategy Larry Keeley, co-founder and president of consultancy firm Doblin, part of the Monitor Group, said the waste found through Ecomagination paid for the programme.

In a speech at the IBF Corporate Venturing and Innovation Partnering conference last month, Keeley said GE in 2007 had set out a plan aiming for an increase in organic growth rates from 5% to 8% a year. He said "Three percentage points is the equivalent of a Fortune 50 company each year."

To achieve this, GE has made more than 190 innovation breakthroughs in the past two years, Keeley said.

He added: "Every business unit has to identify high performance people to be sent to GE's Jack Welch training centre for three weeks. Once there, they spend two days learning the GE innovation methodology, and then with four others form a cohort under a business unit head. None has worked together before or in that area.

"They spend 10 days crunching data and visiting sites then make four presentations at the centre, to the business unit head, to [executive chairman] Jeff Immelt and for funding from the board. If successful [in suggesting an idea] you will probably be moved to the business unit." ►



The battery range from A123 Systems

Keeley warned that other companies would find it difficult to apply the GE model because of its size and connections with governments. But GE is keen to work with others through a process of partnerships as well as corporate venturing, and set up a \$200m clean-tech competition with four venture capital (VC) firms last year.

GE, along with the four VCs (RockPort Capital, Foundation Capital, Kleiner Perkins Caufield & Byers and Emerald Technology Ventures), set up a \$200m Ecomagination competition last year, picking winners from 70,000 entries from the first tranche of the event covering the electric grid.

GE said it and the four VCs had collaborated on sourcing deals, but each firm could decide whether to invest in the clean-tech entrepreneurs. GE said it would invest \$45m in 12 deals seen from the Ecomagination competition, with the remainder coming from the VCs, according to news provider VentureWire.

The 12 deals are: Sweden-based ClimateWell and Ireland's FMC-Tech; US-based companies Consert, JouleX, OPower, Scientific Conservation, SecureRF, Sentient Energy, Soladigm, SustainX and SynapSense; and a collaboration with the Fu Foundation School for Engineering and Applied Science at Columbia University in New York.

In a statement at the time, Immelt said: "The Ecomagination Challenge has delivered on our commitment with partners to drive innovation and investment through collaborative action.

"We are working with these new partners to accelerate the development and deployment of these concepts on a scale that will help drive a cleaner, more efficient and economically viable grid. The partnerships formed through this Challenge represent a new way of doing business at GE as we continue to expand our broad digital energy offering in the growing power grid market."

GE expects these electric grid markets of energy storage, utility security, energy management software and electric vehicle charging services to become a \$20bn business sector by 2015.

The second tranche of the competition, Powering Your Home, covering clean-tech innovations for houses, runs until early this month and offers five winners \$100,000 each.

For a company founded on selling electricity components, such as light bulbs, GE has diversified into other business lines but supplying power equipment for the next generation of energy users remains important.

Last year, GE posted \$100.2bn in revenues for its indus-

trial division while GE Capital had turnover of \$50.5bn.

As well as using corporate venturing and open innovation competitions to become more creative, GE has been increasing its internal research and development (R&D) since the Ecomagination project started in 2005, including a 21% rise last year compared with the \$1.5bn spent in 2009.

GE said in 2005 its plan was to double investment in innovation and technology with the launch of Ecomagination. In the first 5 years GE invested \$5bn in clean tech R&D, and generated \$70bn in Ecomagination revenues. This led in 2009 to GE committing to an additional \$10bn investment in the five-year period to 2015 and to grow Ecomagination revenues at double the rate of overall company growth.

Part of this growth will come from emerging markets as GE's 300,000 employees operate in more than 100 countries. However, rather than developed products in the US and other developed markets and adapt them

for other countries, GE has promoted the idea of reverse innovation.

In an article in October 2009 for information provider Harvard Business Review, GE was said to be using reverse innovation to focus on developing local technologies in emerging markets and then distributing them globally. ■



Case study: Cognovo • • • • •

Stars align for Cognovo's creation

The political and organisational difficulties in spinning off the intellectual property (IP) or assets from a business for the first time requires the stars to be aligned.

For UK-listed semiconductor designer ARM, the astronomical alignment of strategic need, strong management and funding happened with the creation of Cognovo last year.

ARM makes money by charging between 1% and 2% in royalties for the use of its designs by chipmakers in areas such as smartphones and computers. US investment bank Goldman Sachs estimates ARM's potential market at \$50bn by 2015.

Cognovo has a similar strategy for mobile communications, creating technology that allows devices to use a mix of cellular, wireless and broadcast standards – under acronyms such as HSPA+, LTE, LTE-A, WiFi, WiGig, DVB and DMB – to talk to each other across a range of frequencies, called soft modem baseband.

ARM had found itself with IP in baseband after an acquisition in 2002. Bruce Beckloff, vice-president of corporate business development, said: "ARM faced a classic dilemma in corporate development. We focus on general purpose microprocessors, and dedicated baseband technology requires dedicated engineers and marketing that

does not fit the core business easily. However, baseband applications are extremely important to ARM so we want to know how our core technology would intersect with areas of changing technology."

To square the circle, ARM's research and development team worked on soft modem for three years from 2005 to 2008 before a decision had to be taken whether to move the unit to one of the group's five product divisions or wind up the effort.

The soft modem research was still too nascent to be turned into an established product line, and given the financial downturn after the credit crunch started in mid-2007 the most probable option was to kill the project.

However, Beckloff said: "For ARM, baseband is extremely strategic, so keeping the technology going was important regardless of whether it was done inside or out of ARM."

This led ARM to consider a third option – spinning it off. Beckloff said: "Not being active in the market is the risk for a corporation. Baseband is in 1.5 billion phones. ARM partners ship 6 billion chips a year, so it represents an appreciable portion of the total."

"For a spin-out that remains connected to the mother ship you need the strategic connection to compensate for not being directly active in the market. Otherwise you are just taking operating expense off the [balance sheet] by spinning out the team and technology."

Once a spin-out was being considered, ARM's next challenge was finding suitable management. ►



"This was a relatively easy spin-out as we had a great engineering team and technology and there was a great management team out there"

Bruce Beckloff, ARM



In this, it looked at the potential of a start-up in its local area of Cambridge, UK, run by Tony Milbourn.

Milbourn, former chief executive (CEO) of TTP Communications from the time it started in 1988 through a flotation on the London Stock Exchange in 2000 and onwards to its acquisition by Motorola in 2006, is now executive chairman of Cognovo, while TTP's former chief operating officer (COO), Gordon Aspin, is CEO of Cognovo.

Milbourn said: "We have been a management team in cellular and wireless technology for 20 to 25 years. Software-defined modem is a new era and so we started a business in 2009 after TTP's sale, but needed a computing platform and ARM was our preferred partner as it has great technology and is just up the road.

"Out of the blue, Warren East, CEO of ARM, called

and asked me to have a chat to Bruce to get connected up. He understood our direction and the merit of putting his internal unit and us together. At the same time, we needed to be bigger as we had enough cash to keep the lights on but not much else. ARM had already invested 100 to 200 man years in its programme and was looking at other ways of getting value."

Beckloff described it as a "marriage made in heaven". He added: "This was a relatively easy spin-out as we had a great engineering team and technology and there was a great management team out there. If ARM had relied solely on internal managers it would not have been as easy to do."

Mark Radcliffe, senior partner at law firm DLA Piper, said: "Spin-outs play a very important role in a com- ►

Creating value through spin-outs

The rationale for spin-outs is threefold: strategic, financial and technological. Strategically, a spin-out allows the parent corporation to become a customer or partner of the unit. It also opens up new channels to global markets for technology in which corporate business units cannot or will not invest. For the parent corporation, spinning out a unit preserves the option to reacquire or reinvest later when the risk is diminished. Financially, spin-outs allow for access to high-risk capital funding otherwise unavailable. Technologically, research and development (R&D) projects that are spun out inspire the culture of entrepreneurship at the parent company, which may lead to an increased speed of innovation. Additionally, spinning out units is an effective way for the parent corporation to elicit market feedback for R&D projects and thus shape future projection direction.

There has been healthy growth in corporate R&D spending over the years, and more recently it has been higher than more volatile venture capital (VC) spending. A large portion of the technologies developed in corporations are never commercialised either because they cannot significantly affect the parent company's top or bottom line or because they address opportunities too small for the parent to pursue.

There is compelling evidence that value can be generated through spin-outs. One case study would be printing and copying company Xerox. Comparisons of the market capitalisation of Xerox and the cumulative market capitalisation of its spin-outs show that the value of the spin-outs was significantly higher than the value of Xerox during most years. In 2000, the market capitalisation of the spin-outs was seven to 10 times greater than that of Xerox itself. Significant value would have been buried inside Xerox if spin-outs had not been completed.

However, corporate managers face challenges in jus-

Colin Blaydon and Fred Wainwright, professors, Center for Private Equity and Entrepreneurship at Tuck School of Business, Dartmouth University

tifying spin-outs. Management finds it difficult to justify generating \$1m from the spin-out of an R&D project that required a \$50m total investment. Often, management would try to avoid a spin-out when the parent decides to discontinue or not commercialise an investment. The success of a spin-out might undermine the careers of the corporate executive management team because it could lead to questions such as "who sold this great technology?" and "why was it sold so cheaply?"

Corporate venturing groups can engage in the value creation process of spin-outs by aggregating non-strategic operations groups from other corporations. Corporations often develop strong internal operational capabilities because they cannot find appropriate solutions in the market. By spinning out and consolidating several non-strategic groups from different corporate parents, an investor might be able to provide cheaper services at a larger scale. Another appeal to this strategy is that the consolidated spin-out would have top-notch clients, the parent and other large corporations, from day one.

Drawn from proceedings of the National Venture Capital Association Corporate Venture Summit in November 2010 and written up by the Center for Private Equity and Entrepreneurship at Tuck School of Business, Dartmouth University.

pany's larger innovation strategy. The keys to success are understanding the need of third-party financing, which will mean the need to give up control so the nascent company can work with third-party investors and customers. Such release of control can be difficult for corporations, but it is an inevitable result of the decision to spin-out the technology. Most investors will wish to have exclusive rights and the technologists to go along with it."

This is the third requirement for a spin-out – arranging its funding and share structure. ARM provided the majority of funding in Cognovo's initial round, estimated to be about £5m (\$8m), in return for at least 15% equity, a further convertible loan, and a board seat for Graham Budd, ARM's COO.

Beckloff said ARM had no right of first refusal to buy Cognovo or ability to dictate future investors although it would encourage against close competitors.

He said: "Our investment objectives are, first, active management to participate in the ecosystem, second, a window on technology, third, to increase overall ARM group revenues, and, fourth, a financial return on the investment.

"Our investment structure allowed ARM a seat at the table but was below the accounting threshold that then requires a business to be consolidated into the investor's accounts as a subsidiary."

Milbourn said: "On the financial structure, ARM recognised we needed good incentives, while we as the management team were mature and not stupidly aggressive. ARM also knows other investors will come in, but if the business goes belly up the technology will revert to ARM."

However, the equity, and the convertible debt that is in place to help maintain ARM's interest in future rounds, allows the chip designer to remain close to Cognovo.

Milbourn said: "ARM is helpful in three way – first, money, second, we can leverage its sales force, particular in Asia, and, third, Graham Budd is on our board and if we need something from ARM often he can help."

"There is ARM technology around our core Modem Compute Engine and so the technical relationship is very smooth. We would not have it so smooth or deep if ARM had no equity."

However, Milbourn said baseband technology took time to develop and was a challenging area, as the IP licensing business model paid royalties three to four years from



a licence being agreed for a new product. As Milbourn said: "It is a big boys' game and we are little."

This makes finding external funding difficult. Cognovo has applied for grants in Belgium but independent venture capital (VC) firms have shied away from long-term technology investments, Milbourn said. This left corporate venturing as the option. He said: "Corporate investors can see the strategic advantages and return on investment from Cognovo having £100m in turnover by 2020 for £25m investment. The issue with corporate venturing is it usu-

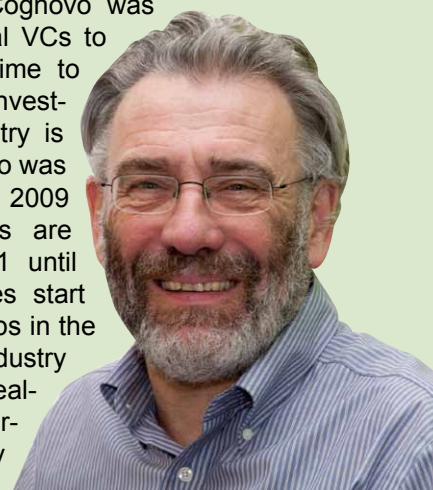
ally needs others to set the round terms, which takes us back to financial investors."

Beckloff said: "Cognovo was difficult for financial VCs to invest in as the time to revenue and early investment in this industry is significant. Cognovo was only established in 2009 and first revenues are modest in 2010/11 until significant revenues start in 2013/14. Start-ups in the semiconductor industry are not very appealing to VCs currently, which is why Smoothstone

(now named Calxeda) which ARM also invested in with several other financial VCs was the first appreciable series A investment for a fabless [non-fabricating]

semiconductor company for almost two years.

"But this absence of money coming in and fewer start-ups means returns will increase as demand for strategically important acquisitions by larger companies remains constant."



"ARM is helpful in three ways – first, money, second, we can leverage its sales force, particular in Asia, and, third, Graham Budd is on our board and if we need something from ARM often he can help"

Tony Milbourn, Cognovo