

Global Corporate Venturing

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Global Corporate Venturing

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Editorial



Corporate starting points

Welcome to this supplement by Global Corporate Venturing for those considering setting up a fund or unit – as well as those seeking a refresher or who have just taken the leap of faith that often represents the state of mind of those tasked with running a new programme.

For a corporation to allocate considerable amounts of money and some of its most senior and talented managers to a project that can be measured only five to 15 years later in terms of financial and strategic success is indeed a leap of faith.

In a world of public equity markets, where the majority of shareholders are short-term orientated and measure returns on a quarterly basis, the commitment is testament to the vision and longer-term stewardship of many chief executives and C-suite managers.

However, corporate venturing is a leap where the risks can be managed and earlier rewards identified.

The analyses, comments and data in this supplement is designed to help a corporation start asking the right questions to piece together the aims, strategy and tactics to suit its culture and business needs. In US universities, course 101 is the start of the syllabus, and this is our intention with this supplement, rather than providing a place that holds the worst thing in the world according to author George Orwell's definition of room 101.

Just as every business is unique based on its history, products, services and ambitions, so corporate venturing can be tailored and personalised to make each journey unique. However, the fundamentals of successful venturing remain constant – have talented people find and work with talented entrepreneurs.

As no company has a monopoly of good ideas or people, the need to provide money potential to support these third parties in return for minority equity is one tool in an innovation toolkit, alongside mergers and acquisitions, joint ventures and alliances, or simply being a supplier or customer.

The framework for the supplement is designed to help a corporation answer the important questions in three areas. First, why do it? Why set up a unit, who else has done so recently and what evidence is there that it works? Second, how is it organised? How does it fit within a wider open-innovation strategy and with making alliances and what are its aims? Third, how do you invest – either directly or as a limited partner in funds?

Many of the answers are provided by the experts who have passed on their years of wisdom as a way of helping the venture ecosystem and who are often happy to provide more specific guidance if appropriate. In a

"The fundamentals of successful venturing remain constant – have talented people find and work with talented entrepreneurs"



field as nuanced and sophisticated as corporate venturing, this supplement is less a do-it-yourself manual than an introduction to a subject that can take a lifetime of learning to master.

It is estimated it takes 10 years and millions of dollars in failed investments to train a venture investor. Fortunately, for corporate venturing the omens for the current generation of ingénues are good – there is a ready pool of experienced venture capitalists looking for new jobs, the supply of entrepreneurs is expanding almost exponentially as the cost of starting a business falls and education increases and the developed world struggles to emerge from the credit crunch and look to innovators as the best salvation to problems caused by too much debt.

Research by Gary Dushnitsky, associate professor at London Business School, revealed at the Global Corporate Venturing Symposium, found companies with corporate venturing units outperform peers without a minority investment strategy.

The outperformance covered both a company's marketto-book-value ratio and its innovation capacity, as judged by patents.

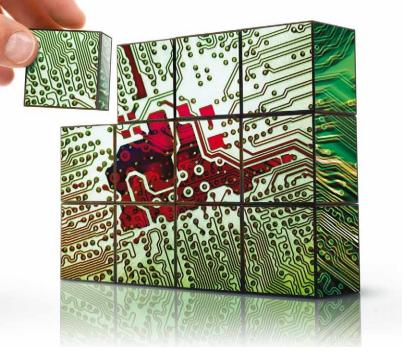
Dushnitsky said between 1987 and 2009, 602 corporations out of a sample of 5,313 had engaged in venturing.

He said: "Companies with corporate venturing units outperform peers in similar fields judged by patenting output and using a market-to-book-value ratio."

During the past decade, he said the precision device subsector, such as for healthcare, had outperformed peers in the value created by using corporate venturing.

As a result, Dushnitsky said: "Corporate venturing is one of the fastest-growing innovation strategies." It is a strategy this supplement is designed to help.

As ever, this supplement is only possible thanks to the requests of the dozens of new groups that asked for information and the support from sponsors SVB Financial Group and DLA Piper. All feedback and ideas are most welcome.



MAKING CONNECTIONS

Our lawyers bring together venture capitalists and emerging companies through a fully integrated service offering^{*}, while our Venture Pipeline business unit matches dynamic young companies with great investors. Our lawyers completed 541 venture capital financings and 435 private equity transactions during 2010. Our 4,200 lawyers have a vast network of global relationships, supplemented by our strategic relationship with The Cohen Group, and we leverage this network to assist our clients to make their business successful.



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EVERYTHING MATTERS

*Ranked 2nd by volume in private equity deals in 2009 and 3rd by volume of venture capital deals in 2009 – Private Equity Analyst, 2010

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Comment



Why corporations look to their innovation toolkit

As Sir Martin Sorrell, chief executive of advertising company WPP Group, one of the most active media corporate venturing supporters, said: "Every chief executive wants the power of a global company with the heart and soul of an entrepreneurial company."

This desire to have the best of both worlds is understandable, prompting companies from across all sectors, sizes and geographies to set up a corporate venturing unit or fund over the past 18 months in a trend that is gathering momentum as it becomes a business necessity to have an innovation toolkit.

Corporations are looking at how they encourage socalled intrapreneurs, the people within an organisation who can cut through bureaucracy and negativity to create something new and innovative. This internal corporate venturing is often a complement to the realisation that while no business has a monopoly of good ideas there is often more that can be done to encourage dynamism and collaboration.

However, most new ideas still originate outside any one company, no matter how innovative, which is leading an increasing number of firms to set up or expand their external corporate venturing programme of investing in entrepreneurs directly in return for a minority equity share, or indirectly by being a limited partner (investor) in an independently-managed venture capital fund.

John Bates, adjunct professor of entrepreneurship at the London Business School, said the fundamental reason companies wanted to promote internal and external corporate venturing was to add speed, innovation, flexibility and excitement to the larger business.

He said these strategic and operational reasons boiled down to accessing new distribution channels, products, lower market entry time or operating costs, or pre-empting competitive attack, as well as creating an ecosystem to help broaden and deepen the market for the parent's products, especially in technology companies.

For entrepreneurial businesses, large companies have huge advantages and potential synergies to work with, including experience, resources, market penetration and processes to commercialise a business concept, as well as lower cost of capital, according to Bates. He said, however, that firms often failed to meet their objectives and use the advantages of corporate venturing because of poor timing or lack of choice about the appropriate model



to follow. The five models are venture harvesting – turning internal resources into cash; venture innovation – developing new business ideas using venture capital-like processes; ecosystem venturing – investing in a community of related businesses; corporate private equity – creating an in-house venture capital unit primarily for financial return; and new leg venturing – developing new business lines.

Bates said a common pitfall for venture harvesting lay in firms trying to build new legs rather than manage the unit for cash. For venture innovation, the pitfall was often trying to address a general corporate need for cultural change, Despite the maturity of corporate venturing divisions, there is still debate about the best model, while ecosystem venturers could suffer loss of focus or a push for autonomy. New leg investors faced the issue of time and commitment by the parent. But when done well, a corporate venturing unit could act as a catalyst for change to "help spawn venturing in other parts of the organisation", Bates said.

Simon Walker, a partner at law firm Taylor Wessing, said performance improved with practice. He said: "The issue for corporate venture capital is: how many deals do they do per year?

"Are they sporadic and opportunistic where corporate venturing is not mainstream but seen as the occasional way to acquire an interest in a technology or product which would otherwise pass them by?

"Alternatively, is it a mainstream activity where they are, as much as anything, looking to maximise returns from their investments but at the same time recognising there will be losers as well as winners?"

It also partly reflects the overall level of venture investing, as many corporate venturing units avoid leading syndicates in funding rounds in favour of following top independent venture capital firms.



Launching into the golden age

The number of corporate venturing units has increased by nearly a third since the start of last year as companies around the world and in all sectors and stages of development realise it has become a must-have part of their innovation toolkit.

In the first nine months of this year, 58 corporate venturing funds or programmes have been launched with an aggregated committed capital of about \$10bn in what has been described as the golden age for the industry, according to Global Corporate Venturing (GCV).

By comparison, last year, \$3bn was committed to 50 new programmes, GCV said.

The size of inaugural funds from China-based media company Tencent at \$1.5bn and US gas developer Chesapeake, \$1bn, make them among the largest debut private equity funds raised by independent or captive managers and are included in the top 10 programme or fund launches this year.

By comparison, in the first six months of the year US venture capital firms (VCs) raised \$8.1bn in 50 funds – 80% of these commitments went to seven firms – while in Europe \$1.1bn was raised by 16 funds, according to data provider Dow Jones.

And long-established and top-tier corporate venturing units have also had an increase in their committed capital, either from their parents or from third-party limited parties drawn by their success.

US-based publisher International Data Group (*IDG in the table above*) will commit at least a quarter of the \$3.3bn being raised by its corporate venturing units in Asia and the US.

Asia and the US are also the primary focus of corporate venturing funds being raised by Europe-based companies, such as luxury goods producer LVMH, enterprise software provider SAP and car maker BMW.

Despite its domestic corporations making up only about a third of the money committed since 2010 to new funds and programmes, the US accounted for 69% of the global deals where a corporate venturing unit was involved, according to GCV.

Excluding flotations, since May last year there have been 852 deals involving a corporate venturing group at an average round of \$52m, or nearly \$45bn in total.

Europe and the rest of the world (primarily China, India and Israel) split the remaining deals evenly by number and value.

Top 10 fundraisings						
in the first nine months of 2011						
Name	HQ	Fund name	Size	Sector		
Tencent	China	Industrial Collaboratio	n \$1.5bn	Media		
Chesapeak	ke US	Chesapeake NG Vent	ures \$1bn	Clean		
IDG	US	IDG Ventures	\$3.3bn (+1/4 by IDG)	Media		
LVMH	France	LVMH Asia	\$640m	Consumer		
Merck	US	Global Innovation	\$500m	Health		
Google	US	Google Ventures	X2 to \$200m/year	IT		
SAP	Germany	SAP Ventures	\$350m	IT		
Intel	US	Ultrabook Fund	\$300m+other	IT		
Baxter Int'l	US	Baxter Ventures	\$200m	Health		
BMW	Germany	BMW I Ventures	\$100m	Transport		
Source: Global Corporate Venturing						

The importance of corporate venturing units in filling deal syndicates and funding entrepreneurs has also grown to potentially record levels.

US trade body the National Venture Capital Association, collecting data via Thomson Reuters and PricewaterhouseCoopers' MoneyTree Report, said corporate venturers made up 15.4% of total deals in the first three months of the year by involvement in 115 of 747 venture deals, although under a different methodology by GCV the proportion was even higher at 23.6% (176 deals).

By contrast, the previous peak of US deal activity by corporate venturing units had been about 18% during 2000.

As US VC numbers shrink by an expected 25% to 50%, corporate venturing has helped provide a complementary source of capital and support to entrepreneurs.

While VCs have focused on internet services and software, corporations have been interested in less fashionable spaces, such as clean-tech, life sciences, and industrial and transport sectors, and have been prepared to commit to co-investment funds alongside potential competitors, such as Rhodia, Schneider and Alstom backing Aster Capital.

Corporate venturing units have also increased their investments in earlier-stage deals alongside angel investors, with UK-based Marshall setting up a specific corporate angel fund earlier this year and others sponsoring accelerators and competitions to encourage start-ups.

The increasing maturity of venture capital as an asset class, celebrating the 75th anniversary this year of its founding by Georges Doriot, has also led to a number of venture portfolio companies setting up their own investment programme, often to invest alongside their former backers, such as US-listed search engine Google and Tencent, or to hire from VCs.



Venture lifecycle lengthens

The quote "I know that half of my budget is wasted, but I'm not sure which half" was not uttered by a corporate venturer, nor by his or her chief executive. Depending on the side of the Atlantic, the well-known dictum is attributed to Lord Leverhulme, Unilever's founder, or John Wanamaker, father of the modern department store, as they pondered the challenges associated with their advertising activities.

Nowadays, innovation is as critical to business success as marketing. In addition to internal research and development, firms are increasingly pursuing innovation through engagement with external partners. Corporate venturing (CV) in particular emerges as a part of a firm's innovation tactics (*Innovation and Commercialization 2010: McKinsey Global Survey results*). Moreover, evidence suggests that although CV investment shares the aforementioned challenges, the current (fourth) wave of CV activity exhibits notable structural changes.

The 21st century hosts the most recent wave of corporate venturing after three earlier, short-lived periods in the 1960s, 1970s and 1990s. Dozens of firms have joined the corporate venture group of US trade body the National Venture Capital Association since late 2003, including 10 this year, and a number of leading corporations remained committed to CV investment even during the sharp declines and despite significant financial losses.

Although the absolute dollar amount of CV is far from its peak, corporate investors have accounted for about 15% of venture capital activity each year since the mid-1990s.

In many respects recent activity has much in common with the previous CV wave.

Corporate investments continue to parallel broader interests of their independent counterparts – internet-based ventures remain a major investment target, as do other traditional venture capital target industries, such as semiconductors, telecommunication equipment and biotechnology.

The rapid growth of clean energy has attracted independent and corporate venture capitalists alike.

However, there has been a marked realignment in investment activity. The software and telecom sectors, which dominated CV portfolios in the 1990s, continue to attract significant but reduced corporate investment. Biotechnology ventures account for almost 20% of aggregate CV investment, up from about 5% in the previous decade. The semiconductor sector exhibits a similar pattern.

The realignment in the aggregate CV portfolio is driven by several factors. First, it reflects, in part, the return to moderate valuations of internet-related ventures. Second, it also captures a shift in the interests of CV investors.

The energy and industry sectors attract significant attention from independent venture capital funds and have Gary Dushnitsky, associate professor, London Business School

experienced a surge in venture formation, which in turn stimulates CV investment. Along these lines, it is important to note that some corporations invest in ventures that operate in their own sector while others invest in neighboring sectors. For example, nearly 50% of all CV investment by chemical and pharmaceutical companies went into ventures within those sectors, while only 18% of all CV investment by semiconductor firms went into semiconductor ventures.

Finally, the maturity of certain sectors as well as currency fluctuations may also affect the relative breakdown of CV portfolios.

These patterns repeat in terms of the geographical diversity of CV investment. For instance, a growing fraction of CV portfolios includes ventures based outside the US, including many ventures in developing countries.

The fraction of CV investment in US-based venture declined from 88% between 1991 and 2000 to 75% between 2001 and 2009 (in nominal amounts). UK-based ventures continue to account for 2% of total CV investment. The relative fraction of developing countries is on the rise. China-based ventures account for 4% of total investment during the fourth wave, up from 1% during the previous wave. And India entered the top five recipients of corporate venture capital, accounting for 1% of global CV investments.

The geographical location of CV programmes remains largely unchanged. We report key data below yet opt not to present graphical breakdown. Data provider VentureX-pert records a slight decrease in the fraction of investment disbursed by US-based corporate investors: down from 83% (1991 to 2000) to 78% (2001 to 2009). During the earlier period, top CV originating countries included Japan (5%), Canada (3%), Singapore, Hong Kong, Germany, the UK, South Korea, and Sweden (1% each). During the later period, top CV investors were based in Canada (6%), South Korea, United Kingdom, Japan, Germany (2% each), Singapore, China, Hong Kong, Switzerland, **>**





Israel, France and the Netherlands (1% each).

These numbers may mask the role of non-US CV investors as many of them are coded as US-based though the parent corporation is not headquartered in the US, such as Panasonic Ventures or Mitsui & Company Venture Partners.

Finally, the fact that CV, in aggregate, tends to originate in and reach the same country does not necessarily mean funds are invested domestically. As we discuss below, CV is used at times to learn about geographically distant markets or to access distant technologies.

On closer investigation, the fourth wave features a critical structural change. It is now the case that an increasing number of corporations view CV as a key component a vehicle for engaging and learning from one particularly innovative pool – that of entrepreneurial ventures. As such, CV investment is an integral part of a firm's innovation toolkit.

Whereas the roots of the change have to do with a broader shift in corporate R&D strategies, the implication to corporate venturing activity remains unclear. Many scholars and practitioners viewed the limited lifespan characteristic of past CV waves as a major hurdle.

It creates internal challenges in terms of attracting talent and staffing the CV programme. It also leads to external difficulties and stifles dealflow: independent venture capitalists may hesitate to co-invest alongside an entity that could be dissolved by the time a follow-on funding round is

needed.

of their innovation strategy. Evidence on CV longevity seems to support that observation. In the past, the average lifespan of a CV programme was 2.5 years, or a third of the average span of 7.1 years for independent venture capital funds, according to academics Paul Gompers and

CV programme investment longevity

The greater stability of current CV programmes has the potential to mitigate both internal and external challenges. The net impact on CV activity, however, has yet to play out in the data.

The history of corporate venturing offers several insights. At the

Longevity based on continous investment, as reported during VC's last year of investment

Josh Lerner. It was often suggested that a chief executive launched a CV programme only for it to be terminated by his or her successor. Nowadays the average CV programme has been in operation for 3.8 years, and many notable programmes are entering their second decade of activity.

Additional analysis reveals that between 2000 and 2009 there were upwards of 350 corporate investors and over 40% of them had been in operation for four years or longer, nearly double the length of those in the previous three waves. As the figure illustrates, the change is driven by significant persistence in venturing activity. The fraction of corporations that engage in equity investment as a one-off activity – that is, invest only for a single year – is cut in half, while the fraction of those that invest for four years or longer has doubled.

The sustained commitment to CV investment alludes to the key role it has in a firm's innovation strategy.

This change did not happen overnight. Rather, it reflects a broader transition in corporate research and development (R&D) strategies: shifting away from an exclusive focus on internal R&D, which, at the extreme, can lead to introvert behaviour, and towards embracing external sources of ideas and innovations – also known as the trend towards Open Innovation.

In that context, corporate venturing can be viewed as

macro level, the emergence of novel technologies is an important driver of CV investment as established firms seek to harness innovative entrepreneurial ventures. The financial markets played a key role as well. Not only did they serve as catalysts for entrepreneurial activity to begin with, but they also facilitated the transformation of new technology into high financial returns.

Interestingly, as CV becomes an integral part of a firm's innovation strategy, it may be sensitive to the former factor – technological ferment – at the expense of the latter – financial markets. More recent changes in the macro environment, including the growing globalisation of venture capital activity and the shuffling of target sectors, is likely to shape the future face of CV investment.

At the corporate level, we continue to observe CV investment is predominantly a large company phenomenon. It is undertaken mainly by incumbents in turbulent industries as a response to Schumpeterian competition. This observation, as well as programmes' greater longevity, suggests that CV activity is now an integral part of a firm's external venturing strategies, also known as Open Innovation.

This is an edited version of a forthcoming chapter, Corporate Venture Capital in the 21st Century, in The Oxford Handbook of Entrepreneurship, Oxford University Press, © Dushnitsky 2010.



Exciting times lie ahead

Venture capital (VC) is going through a deep crisis. While it is often supported by governments for its ability to create successful entrepreneurial companies, it struggles to attract a steady flow of private money.

A stark picture of the dramatic downsizing of the industry emerges from comparing the number of VC funds raised and maturing over the past dozen years. The number of new funds raised since 2008 is tiny compared with the number of maturing funds – those reaching their 10th year of life and therefore ripe for being closed.

If the trend of the first half of 2010 is confirmed throughout the year, there will be more than 300 fewer funds active in Europe, and more than 200 fewer in the US. In terms of amounts of funds raised, this corresponds to nearly \$20bn less in Europe, and \$60bn less in the US. One reaches the same conclusions by assuming funds mature after five years, the typical period of time after which they stop making new investments and start exiting companies.

From the entrepreneur's perspective, the number of companies that obtain venture funding has halved since 2000. These numbers suggest VC investing is shrinking and that many VC firms are forced to close down.

There is more than gloom, however. Many new venture management teams are entering the market. In Europe, about a third of the venture firms active in 2004 have ceased to operate, but about a quarter of those currently active started operating in the past three years. VC is therefore a shrinking industry that is also experiencing substantial entry.

What should we expect for the future? To answer this question we first need to understand the relationship of venture firms with limited partners (LPs) – the institutional investors that ultimately provide the money.

Marco Da Rin, associate professor of finance, Tilburg University



During the past decade, LPs have put large amounts into this asset class, attracted by the promise of a Midas touch. They have often been disappointed. As a result, many of them are retreating to more familiar investments. Those that remain active in investing have become more demanding of venture firms, more aware of fee structure, more skilled at performance measurement, and ultimately more selective in their investment decisions.

A second key point is that investors from the Middle East and Asia have made fundraising increasingly global. Companies from regions far apart are competing for funding, and entrepreneurship becomes more diffuse and mobile. This dismantles established sources of proprietary dealflow and forces venture firms to compete.

This may seem like bad news for venture capitalists, but I do not think so. Fundraising is going to be more difficult for those that have failed to generate adequate returns, either because they lack the skills or because market conditions prompted them to invest at valuations that were far too high. On balance, the exit of these firms should benefit both entrepreneurs and investors.

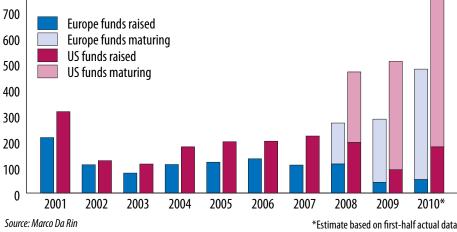
Moreover, many venture firms that enter the market are

experimenting with new ways of generating returns for investors and of supporting promising entrepreneurial ideas. I expect the future will belong to these innovators. Their responsiveness to the structural changes in VC markets will rock the model that has worked so well for two decades.

We are going to see different ways of raising money from limited partners, which is likely to lead to new fund structures. We are also going to see new ways to deploy the money, as venture firms will exploit the changing nature of the world economy, and new ways to create and diffuse entrepreneurial ideas. Exciting times lie ahead, for those

*Estimate based on first-half actual data ready to grab the challenge.

Number of VC funds raised and maturing





Is the venture capital model broken?

Is the US venture capital model broken? Does it need to be appreciably smaller? Does it need to be appreciably different?

We are sceptical of claims that the VC model is broken or needs to be radically changed. As our historical analysis indicates, the level of commitments to and the investment pace of the US VC industry since 2002 have both been consistent with the historic averages. At the same time, the returns to VC funds appear to have

been roughly equal to those of the overall stock market. This does not suggest to us that there is too much money in US VC, nor does it indicate to us that the VC model is broken. Instead it appears to represent the more or less natural evolution of a relatively competitive market.

In fact, the only real difference was the unusual and unexplained paucity of VC-backed initial public offerings, averaging only slightly more than 50 a year between 2004 and 2007.

The small number of IPOs from 2004 to 2007 came despite the robust stock market over that period and despite the large number of companies that received VC funding over the previous five to 10 years. By comparison, in all but one year during the 1990s, there were more than 100 VC-backed IPOs. In five of the 10 years, there were more than 150. Then, in the recession/bear market of 2001 to 2003, the number of VC-backed IPOs dropped below 50 each year. But this was not unusual for a down-market – a similar pattern had occurred in the bear market from 1989 to 1991.

It is not yet clear why there were so few IPOs. Some blame the increased costs imposed on companies by legislation. Some blame increased litigation risk and the concomitant increase in directors' and officers' and other insurance. Some blame inattention from investment banks that were able to make more money from other activities. And some blame the scarcity on the fact that too many similar companies were funded during the dot.com boom, competing so fiercely that consumers received most of the benefits.

But it is important to keep in mind that an IPO is not the only way for a VC to exit an investment. VCs also exit

Steven Kaplan is Neubauer family professor of entrepreneurship and finance, and faculty director of the Polsky Entrepreneurship Center, at the University of Chicago's Booth School of Business

Josh Lerner is Jacob H Schiff professor of investment banking at Harvard Business School

by selling their portfolio companies. Nevertheless, the increase in merger and acquisition exits did not offset the decline in IPOs.

As a result, we suspect there is more upside than downside for the VC vintages of 2001 to 2007. According to informal sources, new legislation is probably less costly and more manageable than it was in 2005 and 2006. There are more boutique investment banks with incentives to market IPOs. And, as we mentioned earlier, recent reports suggest there is now a larger pipeline of IPO candidates.

As we write this, commitments to US VC partnerships appear to be historically low in 2009. In 2009, Private Equity Analyst reported commitments of about \$13bn (€10bn) to US VC funds. Compared with the value of the stock market at the beginning of 2009, commitments are only 0.111% against the historical average of 0.138%. Measured relative to the stock market at the end of the year, the 2009 commitments are even lower, at 0.086%, compared with the historical average of 0.125%. All indications are that commitments are likely to continue to be low into 2010 and possibly beyond.

Based on the historical relationship between commitments and performance, the low level of commitments suggests that returns to the 2009 and 2010 vintage years are likely to be relatively strong.

And there are other grounds for optimism about VC. The most compelling is the transformation of the US corporate research and development system. The central corporate R&D laboratory was a dominant feature of the innovation landscape in the US for most of the 20th century. While the concept of the centralised laboratory originated in the German chemical industry, US corporations had adopted it



with enthusiasm by the 1950s. These campus-like facilities employed thousands of researchers, many of whom were free to pursue fundamental science with little direct commercial applicability. Among the best-known were Bell Laboratories (with 11 Nobel laureates) and IBM Central Research (with five).

Beginning in the early 1990s, however, American corporations began fundamentally rethinking the role of these centralised research facilities. Reflecting both a perception of disappointing commercial returns and intensified competitive pressures, US companies undertook a variety of changes to these facilities. Notable among them were paring the size of central research facilities in favour of divisional laboratories and relying much more heavily on what has been termed "open innovation" – alliances with and acquisitions of smaller firms.

To economists, however, these changes are not surprising. Observers such as Michael Jensen have contrasted the incentives within corporate research facilities unfavourably with those offered by venture capitalists. Jensen suggests that had higher-powered incentives been offered, some of the poor performance of researchintensive firms would have been avoided. Consistent with this argument, Samuel Kortum and Josh Lerner found that venture-backed firms were about three times as efficient in generating innovations as corporate research.

This transformation suggests the demand for venturebacked firms is likely to increase in the medium and longer term. The model of growing companies for full or partial acquisition by larger firms – which has been standard practice for many years in the computer networking business, for instance – is likely to be a growing segment of venture activity in the years to come. And given the fact that corporate research spending, both in the US and globally, is many times the magnitude of venture capital investment, the size of the opportunity is likely to be substantial.

The US VC model has been enormously successful over the past 30 years. During that time, the industry has consistently received commitments and invested at a pace of roughly 0.15% of the value of the overall US stock market. Of course, there has been some variation in commitments and investments around that mean—a variation that can be traced in large part to the recent returns of the industry.

As a general rule, higher returns have typically attracted more capital from investors. But the greater capital has put downward pressure on returns, which in turn has resulted in smaller capital commitments. And as less capital has predictably led to increased returns, we have seen another increase in capital commitments and investment—and hence the beginnings of a new cycle.

We see little that makes us believe the VC model has changed or is broken. As far as we can tell, we are now leaving a period with slightly above average capital and average to slightly below average returns for a period of well below average capital. We would not be surprised to see this followed, perhaps quickly, by a period of above average returns.

The quote reproduced here is extracted from an article entitled It Ain't Broke: The Past, Present, and Future of Venture Capital, published in the Journal of Applied Corporate Finance, Volume 22, No 2, Spring 2010, a Morgan Stanley publication.



Measuring investment effectiveness: part one • •

Financial aims and metrics

Clearly defined methodologies for measuring the effectiveness of corporate venturing (CV) are imperative for longterm programme sustainability. Validation of any organisation's accomplishments against a plan is just good business sense. However, it seems many colleagues struggle with defining and tracking the effectiveness of their CV programmes.

How many times have we seen at innovation and CV conferences the question of how you measure CV effectiveness make many highly experienced CV professionals squirm their seats? No need to squirm folks. In this article I will offer some insights on instituting CV measurement methodologies and metrics, and related complications, I have observed in the industry and which we have refined over the past 14 years at the Panasonic Venture Group.

Basic tenets of business management advocate the principles of setting objectives and metrics in advance of launching business endeavours and then regularly tracking the results. Objectives need to be achievable, metrics need to be representative of those objectives and management must be accountable for the outcomes.

Accountability is feasible, and useful, if objectives are clear and if metrics are evaluated. And monitoring our results throughout the process, not just at the end in hindsight, will enable us to make course corrections as needed to reach our ultimate targets.

In applying these management principles to corporate venturing, there are some complications that will emerge. The first is that in developing the unit's objectives, you realise there may be multiple stakeholders to which the CV team is accountable.

If you have just one stakeholder, then setting objectives is a bit easier for you. But for the rest of us, we need to balance the objectives of sponsors, disparate business units, administrative organisations, review committees and others. And the corporate venturing group also has stakeholders outside the corporation, especially their portfolio companies and co-investors.

The various stakeholders need to be acknowledged by all involved with the organisation, and an understanding of the group's obligations and priorities to each stakeholder should be articulated before proceeding to define the objectives and the appropriate metrics of the CV unit.

It is at this point that the most familiar complication arises. A successful and sustainable CV programme almost always has two broad objectives – strategic and financial – which are not always consistent and some



times difficult to define.

These two macro-objectives co-exist because investment capital is utilised as a means to provide the corporation access to start-ups with the intent to achieve strategic benefits through an alliance. Therefore, there are financial objectives, and respective metrics, in regard to the investment capital deployed – funded alone or alongside financially-driven angels and venture capital firms (VCs) – and there are strategic objectives pertaining to the proposed alliance between the two companies.

While I will describe methodologies for financial and strategic outcomes each on an individual basis, which should be implemented diligently, CVs might also consider establishing and reporting an aggregated return metric (ARM). The ARM will include financial return metrics combined with strategic return metrics, including both qualitative and quantitative metrics.

Financial objectives are easy to understand, so we will start with that. Well, maybe not so easy for corporations. For VCs, it is straightforward since their fund investors, the limited partners (LPs), are seeking the highest riskadjusted return through venture investments.

But for CVs, the investor is the corporation (whether as an LP or direct from the balance sheet), and while producing high internal rates of return (IRRs), a measure of annual performance, may seem to be generally welcome, most corporations are not financial investment companies and therefore their shareholders expect management to achieve earnings through operations and not by betting capital on venture start-ups.



The point here is that scale of capital matters, meaning that too much financial return, or substantial losses, that seriously affects earnings results is not advisable. Corporations need to balance the amount of capital deployed in venturing proportionate to annual free cashflow so as not to create issues with shareholders.

Although some CV groups' financial returns may not match the very top-tier, financially-motivated VCs' returns - and it could be argued that with strategic results the priority for the corporation, it is difficult to attain VC-calibre IRRs - CVs should still apply financial metrics for their pro-

gramme. If no financial return metrics are established, then the group will probably not be managed as a venture investment organisation for sustainable success, but is instead more likely to be run as a pet project fund and in the end the capital will be wasted.

The common finanmetrics cial return for corporate venture investing are:

- Return of capital, plus a cost-of-capital rate.
- Return of capital, plus a cost-of-capital rate, plus the operating expenses of the CV unit.
- Percentage IRR (time-based cashflows) or cash-oncash multiples (on invested capital), plus the operating expenses of the CV unit (or management fee).

Earlier I touched on accountability, which is important in managing

a corporate venturing team. Rewarding the venturing team for good financial performance for which they are accountable is also vital for attracting and retaining venture-experienced professionals.

I strongly recommend companies implement a carry-like bonus compensation package reflective of their financial objectives that is similar to the carried interest model used by VCs, in which the venture partners in aggregate gualify for payouts based on the portfolio's financial returns - for example, 20% of profits. Likewise, a bonus tied to strategic metrics, which I will discuss in the next article, should be considered. Such a reward plan will align the team and the company's common interests.

Another matter CVs need to be aware of is the "portfolio effect" of venture investing - financial returns will benefit a critical minimum number and balance of investments that a CV fund needs to generate positive returns from the portfolio. If a corporation makes too few or too concentrated investments over a period of time, its financial returns will be impaired.

One final point about financial objectives for CVs is that targeting good financial results are not only beneficial to the corporation but also positive for the start-up. Selecting good companies is the first part of producing favourable returns, but also continuing to support portfolio companies with followon investments is an essential part of venture investing, not only to provide the startup with the capital it requires over time, but also to position the CV potentially to generate positive returns on the additional capital deployed.

And at times it can be essential to protect your investment rights, such as with pay-toplay situations. Do not abandon your portfolio companies after the corporation's strategic returns are fulfilled as that may not only affect your portfolio financial

> returns, it will affect your credibility as a long-term, trusted venture investor. If your reputation becomes tarnished, it will reduce your dealflow and you will not have opportunities to partner other start-ups in the future.

> The venture world is a tight-knit community where your dealflow sources, your co-investors and entrepreneurs are continuously observing your actions. So be vigilant in your role as a committed and respected venture investor to preserve your place in the venture community.



How is it organised?



Measuring investment effectiveness: part two • • • •

Strategic objectives

On the previous pages, I wrote about measuring investment effectiveness in terms of one of two macroobjectives – the financial effectiveness of corporate venturing programmes. This article will turn to some principles and implementation guidelines for measuring strategic effectiveness.

Most corporate venturing (CV) units are targeting innovation and growth-oriented strategic objectives, such as business, technology and process, through their association with venture start-ups. Specific objectives will vary and, periodically, the company may not know at the beginning of a venture start-up engagement what particular benefits will be derived from the alliance. Nonetheless, CV units must develop and implement effective methods for planning and measuring the outcomes of their strategic efforts.

Business achievements, such as increased product sales and profits and improvement in profit margins, can usually be measured easily in a straightforward, quantitative way. These objectives can be articulated quite literally in terms of their numerical improvement from some historical benchmark – such as, 20% additional contribution to sales and profits over the past three-year average – but more often the targeted objective will be stated in more nebulous terms – such as, seeking a window to opportunities for growth or generation of seeds for innovation. So, how do we come up with success metrics that communicate the intended outcomes before they are implemented and after they are accomplished? And how do we manage the organisation toward bona fide results if the measurements are so subjective?

One of the most important principles in contributing to corporate innovation is to acknowledge that innovation is a process, not just an outcome. There are many ways to describe the process, but for simplicity I like to characterise it as the 4i's of innovation – ideate, investigate, incubate and implement (see graphic below).

Most companies fail on two levels when implementing their innovation strategies. First, they jump from the idea-



tion phase right to the implementation phase. Second, too many focus mainly on their internal capabilities, competencies and resources and do not make use of partnerships to meet their growth and innovation goals. Corporate venture investment and partnering are carried out by less than half the largest global corporations, and among those that have CV units, most struggle with defining and monitoring subjective strategic objectives.

Each of these four phases of the 4i innovation process is associated with definitive actions carried out by the corporation. Actions lead to results. To measure effectiveness in corporate venturing, the focus should not just be on the objectives or success factors, but more on the process and actions of the organisation. A prerequisite for the venturing team's success is successfully defining the essential actions that will enable it to deliver positive impact on each of the four phases in the innovation process.

At Panasonic Venture Group (PVG), our mission is to "contribute to corporate technology innovation to deliver customer value and accelerate corporate growth". Certainly in regard to our mission statement, you can envision a few quantitative, measurable goals pertaining to

IDEATE INVESTIGATE INCUBATE IMPLEMENT

corporate growth. But how do you measure contribution to corporate technology innovation, let alone contributions to customer value? And how do you measure technology innovation on a relatively short time horizon, such as quarterly or annually? And



while I am piling on such scepticism, how do you deal with shared contribution – for example, joint efforts with multiple parties? Often, the partnership with the venture company is based on a co-development initiative in which the engineers of the start-up work with the engineers of the large company to contribute elements of a solution, such as sub-systems or components, not even complete solutions. This creates complex challenges for measuring the results of the partnership.

It is these complexities that cause some CV units to surrender on their attempt to develop and install sound measurement methodologies. Well, don't give up. Take a sequential approach, starting at a high, mission and objective, level and then work with your stakeholders to define a handful of success factors they expect from the CV group. From the success factors, map out a process of key phases required to meet the success factors. Then with the process, determine the actions that your group must perform to complete the process. Actions, for the most part, are measureable and focusing on them is the keystone for creating effective metrics.

Let us go back to PVG's mission. From our mission, we scaled down one level and defined a handful of high-level success factors based on input from our stakeholders. If the venture team could deliver on these strategic outcomes, we will have achieved success for them and for the corporation. At this point, we do not have clearly defined metrics, but we understand what our stakeholders want us to focus on. The five objectives PVG seeks to deliver to stakeholders are listed in the graphic below.

Of course, it is very important to define the meaning of each general success factor. In the case of joint development for existing business area, for example, it was necessary for us to define what joint development actually means, and idea collaboration and information sources requires clarifying the form of the information and what sort of information is desired, and so on.

In order to define the requisite actions, we created process flowcharts since typically there are multiple, mutually dependent actions required to, for example, create a joint development alliance. Not all minor activities need to be specified in this exercise, just those that are high-priority. The outcome of this effort should be a short list of priority process steps which are clearly linked to each objective, culminating in 10 to 15 actions. In PVG's case, we have about a dozen primary actions that are tied to our five objectives.

To demonstrate the process, for the ideation phase of innovating, the CV team needs to identify and screen seeds of innovation, in the form of venture start-ups and related trends, that can contribute to the corporation's awareness of actionable, emerging opportunities. The primary action required of the CV unit in this phase is to build a network for sourcing best-of-class start-ups as candidates for discovering new or alternative ideas, collecting information on market and technology trends, and identifying solutions that address customer needs to complement those being considered by the corporation.

To build an expansive and productive sourcing network, the venture team will implement outreach activities and relationship development efforts targeting venture capital firms, entrepreneurs, thought leaders and domain influencers. So one of the categories of success metrics will be based on relationship network development for information flow. This may include tracking contact development progress, using a contact database, and interaction monitoring for proactive pursuit of the most productive human network. Other measures might include the value of the human network, in which a qualitative scoring method might be used.

Proceeding with the same methodology through all the general success factors, with the objective of defining the respective actions, will allow you fairly easily to create relevant metrics that will lead you to effective management of your CV unit.

Report cards, or other feedback systems from your stakeholders, are an excellent source of input on management effectiveness and communication. It is best to meet your stakeholders periodically, and often in the early stages of the programme, to understand their expectations and concerns with your activities. Jointly create a methodology based on their high-level priorities, clarifying quantitative and qualitative deliverables. With their input and as the programme evolves, plan to make course corrections in both the actions and the metrics as needed.

There is no single success metric for strategic effectiveness, and as circumstances change, your goals, and maybe even your mission, will change, which will



require adjustment to the best metrics for your group. So be flexible and a bit creative with both quantitative and qualitative measurement methodologies as you track your progress toward meeting your objectives.

The titles of each of the above objectives are self-explanatory, except maybe how technology enablement differs from joint development. Technology enablement is when a technology innovation can be utilised through a partnership without a joint development project. An example might be know-how that is transferred under a preferential relationship.



Measuring the strategic value of venturing deals

Observations from studying large multinational companies

Corporate venturing (CV) investments are a well-established form of equity investments by large corporations in external start-up companies. Unlike other sources of institutional venture capital investments, CV not only provides new firms with financial resources but also offers the opportunity for both the parent firm – the investing company – as well as for the start-ups in the CV portfolio to generate and capture strategic value resulting from overlaps in the business activities of the companies.

But as corporations try to learn from the mistakes of the past, when they exaggerated cyclical trends in the broader venture capital industry, companies now have a more focused and strategic approach to corporate venturing. Research as well as practice show today's corporate venturing activities are evolving from an emphasis on financial investments towards an emphasis on strategic value.

However, it has been harder to measure the success of CV in meeting its strategic aims than for financial returns, which can be simply tracked through equity invested and returned.

Strategic reasons for CV investments can cover a broad spectrum, both on the investor side and the investee side. From the investing company's perspective, the typical motivation for making investments is both to explore and to exploit new opportunities. The explorational value of CV thus lies in the generation of general insights into the development of markets and technologies, whereas the exploitational value lies in enabling specific, applied combinations of new technologies and resources for the par-

ent firm, such as through gaining access to complementary technologies from start-ups.

From the perspective of the portfolio company, the CV relationship can add value to their company in general, through management advice, operational support and added reputation and credibility, referred to as company-related value, or to specific products, through access to complementary

Communicating the message that the future value should be measured could limit the openness towards unknown future solutions and thus reduce the value of insights into new markets and technologies itself



technologies and by gaining easy access to channels to market, referred to as product-related value.

While placing an increased emphasis on the strategic value of CV activities, companies at the same time have to change their approach to measuring and monitoring the performance of their investment activities. While welldeveloped metrics for financial performance of CV investments can be adopted from the institutional venture capital industry, keeping track of the strategic value of the CV relationships seems to be a bigger challenge.

A study conducted at the Centre for Technology Management at the University of Cambridge addresses this challenge by giving evidence of metrics and performance indicators currently used in practice. The study relies on observations of nine in-depth case studies of the wellestablished CV programmes of large multinational companies. The study found that no holistic metrics system

> exists which allows evaluation of the overall strategic value created by CV activities. Instead, individual indicators for specific aspects are used to keep track of the performance of the CV unit and the strategic relationships between the parent firm and the portfolio start-ups.

> The chart on the next page gives a comprehensive and cumulative overview of those met-



rics and indicators observed in the nine CV programme case studies. This overview reveals a number of relevant findings, which should be considered by companies setting up metric systems for strategic value.

First, it shows that a range of different soft metrics (casebased success stories and examples), quantifiable, nonmonetary metrics (numbers which refer to a frequency of events or activities) and quantifiable, monetary metrics (monetary sums which indicate value creation) can be used for the evaluation of CV programmes.

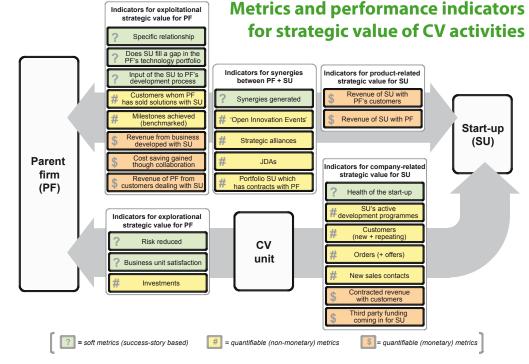
A large group of the studied companies emphasised the importance of "success stories" – for example short

stories to illustrate where CV activities had led to a specific relationship, synergies or reduced risks – for securing top-level as well as business-unit-level management support. Those often seem to be found more effective for demonstrating value creation than complex metric systems. Nonetheless, additional quantifiable metrics are seen to be important, in particular for monitoring the various processes.

Second, the figure illustrates that metrics and indicators are used for monitoring different relationships between the players. Within the figure, sets of metrics are allocated to the channels through which the value is transferred within the CV triad of the CV unit, the parent firm and the startups. This shows companies should aim to use a broad range of different metrics to reflect the different strategic interests of the players. For example, metrics for the value generated for the start-up focus mainly on prerevenue indicators such as number of customers and orders placed, and thus focus on the general generation of revenues, whereas metrics used for the parent firm are covering a broader spectrum, from risk reduction and created synergies to new customers and revenues.

Third, the figure highlights that metrics currently in use by companies cover different aspects of strategic value to a very different degree. For example, the largest set of metrics focuses on strategic value related to specific projects undertaken directly between the parent firm and the startup. Those projects typically focus on exploiting opportunities around specific technologies and products, resulting in products whose performance can be measured comparatively easily through revenue and prerevenue indicators.

The explorational value of CV on the other hand seems



to be much more difficult to measure. In the case studies, no quantifiable metrics have been observed to indicate generated explorational value such as market knowledge or understanding of technological trends. Instead, it is demonstrated only indirectly by tracking the general investment activity of the CV unit (number of investments) and by demonstrating that investments have reduced risks and that the business units are satisfied with the services of the CV unit.

Even though not explicitly mentioned in the case studies, it could furthermore be argued that putting quantifiable metrics on explorational value dimensions might not even be desirable. Communicating the message that future value should be measured could limit the openness towards unknown future solutions and thus reduce the value of insights into new markets and technologies itself.

A somewhat surprising result from the study is the observation that companies did not seem to monitor the activity of their CV unit regarding the "matchmaking" processes – establishing and facilitating relationships between the parent firm's business units and the start-ups in the portfolio). This stands in contrast to the observation that facilitation processes are viewed to be crucial for the future success of CV activities. Future efforts for the development of metrics and performance indicators could thus focus on introducing systems for monitoring the matchmaking processes.

If you are interested in accessing further findings from this research project, contact Johann Jakob Napp, Centre for Technology Management, Institute for Manufacturing, University of Cambridge, 17 Charles Babbage Road, Cambridge CB3 0FS, UK or email johann.j.napp@cantab.net.



Compensating corporate venture capitalists

Corporate venturing units aim to help their parent companies find highly profitable new projects, spot promising technologies before competitors do, and collaborate with the best new thinkers in their field.

But to score these kinds of wins, companies must organise their VC efforts with an eye to the delicate balance between entrepreneurial finance and organisational reality.

Our analysis* suggests companies that are not doing that may be undercutting themselves. Specifically, we study the compensation awarded to

corporate venture capitalists (CVCs) and its implications to investment practices and performance, using data from more than 13,000 venture capital rounds during the 1990s.

A typical independent venture capital fund raises money from pension funds, universities and wealthy individuals, and then invests the funds on behalf of those investors. The VC's compensation scheme usually consists of the "2 and 20" – that is, an annual 2% of the total assets under management plus 20% of profits.

CVCs, in contrast, invest their parent company's money and often receive just a salary and maybe an annual bonus. In a famous example from the 1990s, a German software maker paid straight salary to the head of its Silicon Valley VC unit even though he racked up a 6,000% return on the company's \$25m portfolio.

We find that CVC compensation schemes can have a critical impact on performance. On average, the rate of successful portfolio exits for CVCs is similar or higher than that experienced by independent venture capitalists

(IVCs), probably due to a CVC's ability to leverage parent-firm resources, industry foresight, and customer and supplier networks.

However, the CVC-IVC performance gap is sensitive to CVC compensation schemes – it is large when CVCs receive performance-related pay, and diminishes substantially when "CVCs who receive more performancerelated pay partake in deals that look a lot like the ones conducted by IVCs – these CVCs invest in earlier stages and make their investments through smaller syndicates"



they receive little or no incentive.

What explains the performance differential? Detailed analysis of investment practices reveals that, on average, CVCs shy away from risk. We observe that corporations invest in more mature and potentially less risky ventures than IVCs do. In addition, deals involving a CVC unit are associated with a syndicate size that is 49% larger than those with IVC participation alone. These patterns persist even after controlling for units' objectives (financial or strategic) and other corporate characteristics.

Interestingly, in the presence of performance-related pay, CVCs engage in practices that differ only slightly from that of their IVC counterparts. Put differently, CVCs who receive more performance-related pay partake in deals that look a lot like the ones conducted by IVCs – these CVCs invest in earlier stages and make their investments through smaller syndicates.

When setting CVC compensation schemes, corporations should be aware of the implications. Awarding high-

> powered incentives to a handful of individuals may run contrary to corporate culture, but failure to compensate for success may prevent the corporate VC unit from fulfilling its potential. * Entrepreneurial Finance Meets Organizational Reality: Comparing Investment Practices by Corporate and Independent Venture Capitalists.



Riding the 'fifth wave'

Corporate venturing has undergone massive changes in the past 50 years, tracking with the growth and evolution of venture capital (VC) in a sequence of phases or waves punctuated by economic downturns.

We have seen five clear cycles in this 50-year period, with each cycle teaching new lessons, as well as bringing volatility. Over this time, corporate venturing moved from a siloed and isolated financial experiment to an important and integrated element of mainstream corporate innovation.

Now, rising from the ashes of the 2008 recession, in what we call the fifth wave, we see unprecedented opportunity for all the pieces to come together, especially for corporations that know how to collaborate on innovation in this global environment.

The first wave rose in the 1960s, fuelled by the early successes of technology VCs that hit paydirt with rising stars like Digital Equipment Corporation, Memorex and Raychem. The Fortune 500 took notice, with 25% of companies in the index establishing divisions that emulated VC greats in the late 1960s and early 1970s. But, as the initial public offering (IPO) market dried up in the early 1970s, many companies quickly lost interest and shut down their corporate venturing programmes.

The second wave broke in the late 1970s, catalysed by large changes in taxation and regulatory compliance as capital gains taxes were slashed (encouraging longer-term investment) and pension fund investment restrictions were eased. A resurgence of corporate investment in new ventures soon followed, with high-tech and pharmaceutical companies leading the way. But with the crash of 1987, the





IPO market once again dried up, and by 1992 the number of corporate venturing programmes had fallen by a third.

The dot.com era of the go-go 1990s fuelled the third wave in corporate venturing. VCs increased investment levels, realising incredible returns and creating incentives for corporate investors to participate in the fast-paced, evolving "new" internet economy. At the same time, companies that had relied on traditional research and development (R&D) approaches shifted gears, and began to look outside for ideas.

This led to open innovation models relying on joint ventures, acquisitions and academic ties. As their objectives began to align, VCs and corporate venturing organisations began to collaborate, albeit tentatively. Then came the end of the irrational exuberance of the internet run-up with the Nasdaq stock market crash in 2000, which happened at a speed and scale no one had thought possible.

By 2006, after a period of retrenchment on all fronts, the

signs of recuperation were evident. VCs were investing again in early-stage companies, with high-profile IPOs (Google in 2004) and launches (Facebook), and the fourth wave gained momentum. With this wave, innovation had become recognised as paramount for large companies' future success, and corporate venturing gathered steam as an acknowledged vehicle for successful innovation. Then, just as VC investments were beginning to take hold and these large companies were beginning to re-establish and expand their innovation programmes, along came the perfect financial storm.

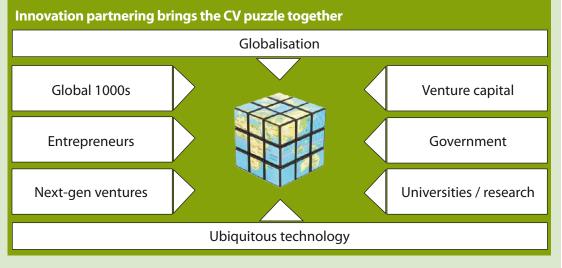
The distress of the 2008 financial meltdown threatened VC business models by slamming the door on IPOs, while big companies also took severe economic hits that forced them to retrench, wring any excess out of established business operations and pull back selectively on long-term plans. At the same time, many



A view from the trenches

Bell-Mason Group rules for acting on fifth wave opportunities

Rethink management's role: Today, innovation is а board-level priority, as corporations think through their strategies for growth and figure out how to act on innovation as a means to this end. But corporate strategy is about change, and the role of management is to build vision and drive that change. Make sure the right



players, with sufficient corporate clout, are in place to lead the charge. And consider the next generation role of the chief innovation officer, exemplified by leaders like Deborah Hopkins at Citigroup, Rob van Leen at DSM, and Steve Meller, Proctor & Gamble's chief innovation catalyst.

Shift from vertical to horizontal thinking: Eliminate silos and leverage global innovation ecosystems to help drive change, targeting customer-centric opportunities and applications in adjacent markets, as well as platforms that can spawn multiple businesses and breakaway ventures.

Establish an internal innovation network: Put the right level of internal touch points and access in place to deliver high value to ecosystem partners as a corporate collaborator. This group is likely to include mergers and acquisitions, corporate development, research, and the established businesses. Then set up complementary roles in both the corporate and partnering entities whose primary focus is on accelerating and augmenting growth.

Define the external ecosystem partnering strategy and structure: Identify strategic innovation themes and focus areas, map the associated ecosystems and structure the partnering program to address them. Make VCs, complementary corporations, universities and government laboratories a priority in areas where the company will bring the most value.

Redefine performance measurement: Measuring the success and value of a corporate venturing and innovation initiative is best approached from a range of perspectives. These include alignment with a company's strategic priorities, and measuring progress and what knowledge is gained. These metrics should provide an aggregate view that combines both strategic and financial performance measures that illustrate the indirect benefit and value of a portfolio of ventures to the corporation.

leading corporations, such as Cisco, Procter & Gamble and Citigroup, saw this as an opportunity to double down on innovation.

As a result, the motivation for collaboration as a means to an end became the order of the day. VCs now needed corporations to serve as exit opportunities – acquirers of their portfolio companies. And big companies that knew how to play according to the rules of innovation and venturing were able to access opportunities of increasing quality, with VCs as potential portfolio partners. In the meantime, the environment was breeding new opportunities – global, horizontal, cross-segment, and cross-industry – in ways we had never seen before.

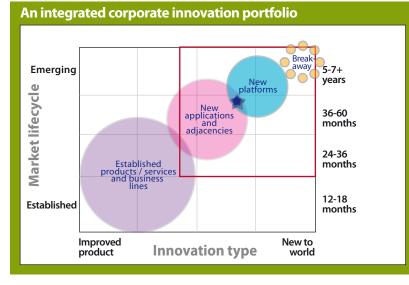
The ability to play successfully at these global levels and

in new ways also required an unprecedented level of collaboration. All the players, especially VCs and large corporations, needed to learn new ways of working with one another to succeed.

As corporates make innovation a priority in driving growth and industry leadership, corporate venturing in all its flavours – corporate venture capital, incubation, joint ventures, business partnering – now takes its place in a strategy constellation with the more traditional functions of R&D, mergers and acquisitions, and corporate development. Today, we are seeing many groups reborn as corporate venturing and innovation (CV&I) units.

So what is the foundation for successful corporate venturing, as we ride this fifth wave? Innovation partnering





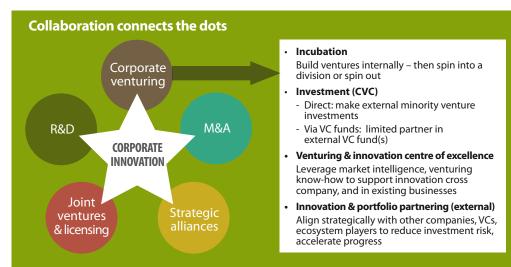
allows companies that are adept at acting on the results to be the winners.

Innovation partnering takes place on two fronts. Internally, it is about stitching together an innovation network across the spectrum, while establishing charters and performance expectations relative to corporate strategy. Externally, it is about defining vertical and horizontal ecosystems (VC, academic, corporate and public sector) beyond the core business, and being prepared to invest time, money and resources.

It is critical to recognise that innovation partnering is a two-way street. Success requires a significant shift in corporate behaviour, and a new skill set – a "give to get" approach that is flexible and adaptable. Success also requires an understanding of the ecosystem, creating value for all involved and enabling different kinds of partnership structures. This give to get approach will set the theme of corporate venturing and innovation for the next decade, and that collaboration skills will be the language behind its success.

Fostering the development and embedding of complex

platforms, adjacent applications and new business models is by necessity a collaborative and iterative activity. It is one that is not native to the operations of established businesses focused on quarter-to-quarter profitability. It is, therefore, important to take a strategic approach to building a CV&I portfolio based on the understanding the corporation with its established businesses has, at best, a three-year patience cycle for corporate venturing. Corporations need to see evidence



they are on the right path within that timeframe.

Corporate investments aimed to deliver after the three-year window should be balanced with investments in markets that are adjacent to the core business in markets ready to be catalysed for growth and so yielding early wins. With these investments, large companies can bring their outsized capabilities and global influence to help innovation ecosystems and markets. Their entry, in turn, opens the door to the full spectrum of innovation opportunities for corporate venturing

There is no better place to find these kinds of partnerships than with the best VCs. Often, these partnerships are in conjunction with other leading corporations that bring horizontal perspective of a sector and the ability to both leverage government incentives and provide infrastructure support. Best of all, both parties

can win because partnering with the world's 1,000 biggest companies can also help the VCs' portfolio companies commercialise their intellectual property, grow the ecosystem and expand globally through an increased awareness of their brand.

For example, Shopkick, a start-up in social media and location-based services funded by VC firm Kleiner Perkins Caufield & Byers, worked with companies Procter and Gamble, Kraft, Citigroup and Target.

In this era of the fifth wave in CV&I, companies are connecting all their innovation portfolios worldwide. These companies recognise CV&I can lead to sustainable growth and long-term success.

They will achieve success by collaborating with complementary partners and integrating novel approaches and new solutions. In doing this, the next generation of industry leaders may yet emerge, establishing their position and cementing their roles as collaborators that accelerate the commercialisation of innovation on a global scale.



Licence to create: keeping corporate

entrepreneurs happy

Entrepreneurs stand out in a crowd. They like being their own boss. They think big, take risks and shrug off failure. When they feel stifled or bored, they either change their environment or leave. But do not let them go. Your organisation needs them.

The entrepreneurs on your payroll are the pioneers who spark new enterprises, products, services and processes. They see opportunities that others miss and create value for everyone around them, including customers, employees, shareholders and communities.

While some entrepreneurs prefer the freedom of starting their own companies, you have assets in your organisation that can entice many to stay. Organisations in the commercial, social and public sectors all show results when they invest in the development and retention of entrepreneurs.

As organisations grow larger and stabilise, natural barriers to entrepreneurship emerge. I explore these barriers and offer solutions in my new book, Corporate Entrepreneurship: How to Create a Thriving Entrepreneurial Spirit Throughout Your Company (to be published by McGraw-Hill in September), co-authored with Thunderbird School of Global Management researcher Claudine Kearney, PhD.

Corporate entrepreneurship involves overcoming the inertia, rigidity, rules and bureaucratic roadblocks that entrepreneurs hate. Senior managers must address key challenges in three areas – corporate culture, communication and compensation.

Corporate culture

Coming to work needs to be fun for entrepreneurs. They need flexibility to explore ideas, tackle challenges and make mistakes. Sometimes they need to stare out of a window or go for a walk.

This is fine if they work for themselves, but corporate paychecks come with bottom-line responsibility. Public companies must answer to shareholders, regulators and tax collectors. Freedom must have limits.

The key is compromise. American Greetings in Cleveland, Ohio, showed the right balance when it moved into the online greeting card business in the early 2000s. The company established a subsidiary for its online cards in a separate building away from the formal offices.

Instead of a receptionist sitting behind a desk, guests find workers dressed in T-shirts working irregular hours, eating pizza and sometimes playing table tennis. The subsidiary operates within the corporate structure but rewards Robert Hisrich, Garvin Professor of Global Entrepreneurship and director of the Walker Center for Global Entrepreneurship at Thunderbird School of Global Management

different types of behaviour and output. As a result, innovation has flourished.

Managers who invest in this type of corporate culture find they can never return to the old way of doing business. Once their teams experience a model of controlled freedom, they get entrepreneurship in their blood and never want to change back.

Communication

Another key to keeping corporate entrepreneurs happy is to communicate the benefits your organisation provides.

Entrepreneurs who operate in the corporate structure never will achieve the multimillion-dollar payoffs that come with breakthrough start-ups, but their chances of success rise dramatically when they tap into your marketing, finance and accounting resources. Corporate entrepreneurs need to understand this. You need them, but they need you.

Compensation

Another aspect of communication involves listening to the needs of your best employees when it comes to compensation. Entrepreneurs who pass up the prospect of a lucrative initial public offering or private equity buyout still need fair pay for the value they create within your organisation.

Creative and responsive managers consider economic and non-economic rewards. Economic rewards start with base salary but might include stock options, performance pay and other bonus systems, perhaps college tuition assistance for the entrepreneur's family.

On the non-economic side, managers might offer flexible hours, generous vacation time, project autonomy, support of various social initiatives, or even preferred car parking.

People are the most important asset of any organisation. This is the hardest thing for competitors to replicate. Managers who take steps to keep their entrepreneurs happy give their organisations an edge.

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Alliances in cross-sector innovation

Alliance managers create opportunities through innovation across non-traditional industries, such as high-tech with healthcare, construction and energy, but the types of partnerships undertaken are evolving.

Nearly all the 24 senior alliance leaders at the fifth Annual 2011 Alliance Executive Breakfast in January said they were engaging in what can be called non-traditional partnering models. This takes many forms, with computer groups IBM and Cisco dedicating assets to creating new markets through cross-sector partnering.

IBM's Smarter Planet initiative to add intelligence to roadways, healthcare, power grids and food production for a better way of living and Cisco's Smart+ Connected Communities – with its vision of the city using the network to connect people, services, community assets and information – are pioneering the application of information technologies (ITs) to customer challenges, partnering companies outside the traditional IT stack and often blurring the definition of customer and partner.

IBM's website says: "A smarter planet will require a profound shift in management and governance toward far more collaborative approaches."

Or as Cisco put it: "These are big mega-deals that result in interesting partnerships. There is an effort to build out the partner ecosystem to support these emerging opportunities and we are looking for more non-traditional partners."

Google also has a non-traditional business model and a legacy of partnering outside their specific industry. It said: "Partnerships do not drive direct revenue; they bring users to the Google site. The commercial model is indirect; it is through advertising."

Other companies are reacting to the dynamics in the industry as a result of maturing technologies, industry consolidation, and economic challenges.

During the past few years, the more forward-thinking organisations continued to invest in disruptive technologies and placed big bets on emerging markets in order to create new revenue streams in a challenging economy and to establish beachheads that would drive a leading position as the economy turned.

This environment has given rise to innovation in cross sector partnerships.

The breakfast discussion comprised three main areas of exploration: customer challenges, non-traditional partner types and partnering challenges. The following emerged from the discussion.

1 Customer relevance is critical. All companies are facing the need to understand their customer needs better and how they can compete more effectively in this rapidly changing environment. "Relevance" was a frequently heard term. Norma Watenpaugh and Mary Tate, Phoenix Consulting Group

2Customers come first. Many participants expressed that, in the past, the focus was more on the alliance than the customer, but that has changed. There is also a blurring of partners and customers. Customers are frequently part of the alliance for cross-sector solutions.

3 Consumerisation of IT is a disruptive trend. Rapid adoption of mobile devices is creating both new challenges and opportunities. The impact on computing demands is changing and not altogether certain.

Companies are entering new spaces, facing new challenges and, of necessity, forming new partner ecosystems built around the customer.

5 Partner value is changing. The traditional labels – hardware, software, service and channel – do not describe the value they bring to the new ecosystems. New ways of evaluating partners by the role they play and the contributions they make are emerging. For partners in the cloud ecosystem, the traditional models of resale distribution may not be sufficient or compelling, driving the need to think out of the box in finding partners who can extend your business.

6 Partnering competitors is not a new concept, but the amount of co-operation today is enormous.

7Partnering business models are changing. These non-traditional alliances are long-range investments, thus challenging traditional assumptions and business practices.

8"How patient is your capital?" was among the questions posed. In the business-as-usual model, alliances are pressed to deliver quarterly revenues. Non-traditional partnering models are calling for non-traditional ways to recognise return on the relationship.

9 Cultural differences may be a challenge greater than business process or practices when working with cross-industry partners.

10Skill sets are not where they need to be. There is a need to move from a singular sales, marketing and alliance role to more of an aggregated systems integrator role that requires a combination of sales skills, technical prowess and business acuity.

Discussed at the fifth Annual 2011 Alliance Executive Breakfast hosted by Google and the Association of Strategic Alliance Professionals' California Chapter's Executive White Paper 2011.



Succeeding with corporate innovation

Successful innovation has become critical to corporate success. The importance of innovation was reinforced by the 2011 State of the Union address by US President Barack Obama who mentioned "innovation" seven times in his speech, an unprecedented focus on this issue.

Innovation is critical because of the new business landscape characterised by more intense and global competition. This reality demands a different approach to innovation, one based on collaboration and the strategic use of intellectual property.

For example, many of the recent innovations in the smartphone market have come from outside the industry. In 2010, two of the three major smartphone operating systems were Apple's iOS and Google's Android, both from companies outside the handset, and even the telecom, industry. These developments demonstrate the nature and source of competition is not as predictable as it once was. Who would have predicted the ability of the iPhone to play music and use "apps" would be as important as its phone functions?

In fact, the vast majority of components for both the iPhone and the leading Android phone, or the Droid, are made by third parties, not Apple or Motorola. This type of collaboration has become essential for success even for Motorola, a traditional manufacturer of handsets.

In software, there is a similar trend. The open-source movement has dramatically altered the software business landscape. Mark Driver, Gartner's lead analyst for open source software predicted in his November 2010 report that by 2016, open-source software would be included in mission-critical software portfolios within 99% of Global 2000 enterprises, up from 75% in 2010. Software is now "assembled" from existing third-party components rather than, as in the past, being written from scratch.

Most open-source software programs are developed by a large number of programmers from different companies who are informally organised into projects rather than corporate entities. For example, the open-source Apache web server software consistently dominates its market (its current market share is close to 60%) against competition from large companies such as IBM and Microsoft. The open-source Linux operating system is one of the few competitors to Microsoft's operating systems and the open-source Android operating system has become the third most widely used smartphone operating system in less than three years. Moreover, these programs no longer rely on contributions by individual contributors working on their own time but are supported by major corporations.

Ironically, open-source software, which is distributed without charge, represents a return to the treatment of software at the beginning of the computer industry in the 1970s. However, in 1976, Bill Gates created a revolution



Key changes to business environment

- 1 Competition is intense and from many (unexpected) sources
- 2 Open innovation is reality: much innovation occurs outside large companies
- **3** Innovation in products/services frequently requires collaboration of multiple parties
- 4 Innovation is global
- **5** Intellectual property is critical to participating in collaboration and ensuring a sustainable competitive advantage

Five rules for success in corporate innovation

- 1 Companies need to engage with the start-up community
- 2 Collaboration with other companies is essential to develop new markets/technology
- 3 Companies need to understand and effectively manage and exploit internal assets
- 4 An open culture is critical to success in the new collaboration environment
- **5** The use of intellectual property as a bridge rather than a stick is important

by recognising that software had separate value and in his famous "open letter to hobbyists" demanded that users should compensate developers for such software. This insight gave rise to the proprietary software industry.

These trends have several consequences. What do you have to trade to participate in a collaborative world? The most frequent answer is intellectual property (IP). Although accurately valuing IP remains uncertain under current accounting rules, accountants are continuing to work on a way of giving it value. Yet, IP clearly has significant value. For example, IBM has developed a system of exploiting its IP and consistently earns \$1.2bn to \$1.5bn a year by licensing it.

Corporate venturing has a critical role in this innovation ecosystem – corporate venture capitalists, in addition to their traditional roles of making investments, can add



significant value by understanding and reporting on developments in the business ecosystem of the relevant market. This mission had traditionally been focused on companies, but with the rise in importance of IP, their charter needs to be extended to understanding the IP landscape in the relevant market. They can also assist their colleagues in finding ways to work with start-ups by helping them to understand the start-up culture, which is very different from larger companies.

Although corporate venturing has traditionally been focused on equity investments, some corporations are expanding this engagement through preferential access to corporate resources and products. Examples of this approach are the Microsoft BizSpark program and IBM's Global Entrepreneur program. In addition, corporations are using their IP as a currency to encourage collaboration – Marshall Phelps in his book *Burning the Ships* notes that after Microsoft shifted away from its "fortress" mentality, it rapidly entered into more than 500 technology sharing agreements.

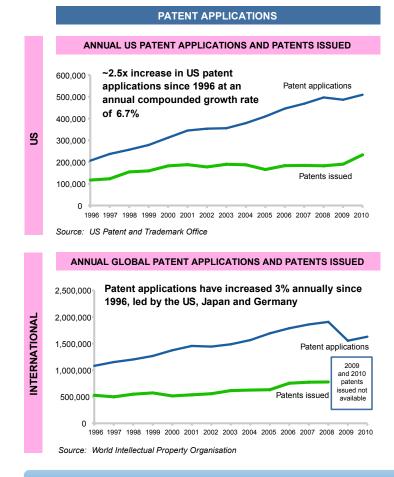
The problem for many corporations is that IP has been viewed as a stick to beat competitors rather than a tool for collaboration. In a collaborative innovation ecosystem, however, the corporation depends on other members of the ecosystem to assist in the development of new products and new versions of existing products. In this ecosystem, the reputation for being a good partner and collaborator is more important than cutting a penny off the price from a supplier.

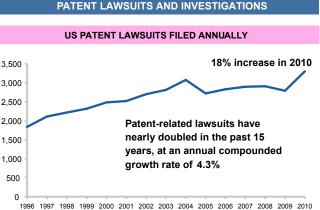
Collaboration is critical to success. However, it requires understanding about where you can add value and a willingness to experiment. For example, Google quickly learned that it would not be effective as a smartphone distributor with the problems of the Nexus One phone and turned to partners to distribute the smartphone.

Successful collaborations are difficult and require a different approach to the use of IP and the structuring of the legal agreements implementing the relationship. It is not enough to jump on the latest trends. Open-source licensing is one of the most powerful trends in software development in the last decade, but "open sourcing" the Symbian smartphone operating system was not enough to make it successful for Nokia. And the collaboration ecosystem demands consideration of new risks. For example, 12 lawsuits, ranging from patent to copyright, were filed in 2010 involving the Android operating system.

Successful innovation – and particularly the necessity of collaboration – also demands the right corporate business culture. Many successful corporations have a business culture which is inward focused and rejects innovation

Rapid growth in patent applications and intellectual property lawsuits





1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 201 Source: US courts; directors' annual reports



Source: US International Trade Commission





The pharmaceutical sector has a long tradition of working with start-ups that create new drugs which are then commercialised by large pharmaceutical companies

"not invented here". Consequently, they treat other members of the ecosystem as fungible suppliers rather than partners. This approach does not work in the new competitive landscape.

Microsoft has made one of the most dramatic changes in the last decade in this area – from a "fortress" protected by its market position and IP to a company seeking to use its IP as a bridge to collaboration. This change was led by a new general counsel, Brad Smith, and his deputy general counsel (and vice-president), Marshall Phelps, and motivated in part by the government suits against Microsoft.

Microsoft took three major steps to implement its change of strategy. First, it eliminated certain harsh provisions in its licences and sought cross-licences with other companies. Second, it hired Dan'l Lewin in Silicon Valley to engage with the start-up and venture capital community and to ensure Microsoft is sensitive to the start-up culture. Third, it established the BizSpark programme in 2008 to provide access to Microsoft's software development tools and platforms, and connections to BizSpark Network Partners.

However, each industry approaches these issues in a different manner. For example, the pharmaceutical sector has a long tradition of working with start-ups that create new drugs which are then commercialised by large pharmaceutical companies.

Recently, James Greenwood, chief executive of BIO (an industry trade association), focused on the critical nature of IP and its exploitation in the development of the biotechnology industry in the US – the Chakrabarty decision in the Supreme Court, which dramatically expanded the scope of patent protection, and the Bayh-Dole Act, which permitted universities to own and licence patents developed under government grants.

He says these two changes in 1980 "set the stage for an explosion of innovation in the US that continues today". The public-private collaborations encouraged by the Bayh-Dole Act continue to accelerate innovation. In 2009, 658 new commercial products were introduced based on academic inventions and universities successfully spun out 596 new companies.

Despite this impressive record, many analysts are concerned the pharmaceutical industry is not innovating effectively. The US government is sufficiently concerned about this issue it recently established the US National Institutes of Health and is setting up a National Center for Advancing Translational Sciences to help drug design to bridge the gap between research and actual development of compounds and means of treatment.

Many other governments are also involved in encouraging innovation. Singapore developed its National Technology Plan in 1991 and has been using five-year plans to execute it. It is focusing on development of biomedical, digital media and clean technology industries. China is well known for its government support for the solar and wind industries.

Success in this new competitive environment requires an open business culture which encourages internal innovation and works well with other companies in collaborations critical to success. Corporations also need to rethink their use of IP and be prepared to use it as a bridge in collaborations rather than a stick for beating competitors.

Elements in effective IP strategy





Elements in effective IP strategy

These are the DLA Piper-advised elements of an effective intellectual property strategy for a US-based startup within a corporate venturing unit's portfolio. They should be reviewed on at least an annual basis.

Patent strategy

• The start-up should have a process for identifying potentially patentable inventions. The decision should take into account the trade-off between patent and trade secret protection. The start-up should focus on "chokepoint" inventions which can control versions of the product made by a competitor. The strategy could include patenting both the product and the method of manufacture, and should take into account the patents filed by competitors in order to be able to respond to potential challenges.

• This process should also provide a method for deciding the countries in which the invention will be protected based on its importance, cost and the availability of protection under local law.

• The strategy should ensure the decisions regarding protection of inventions are made prior to public disclosure.

 The strategy may also include a decision to disclose some inventions so a third party cannot patent it.

• The strategy should also address how to participate in standards bodies if the product or services will be based on standards.

• The strategy should include review of patent applications once a year to confirm they are still relevant to the company's business.

• The strategy should prepare for the shift in the US to a first-to-file rule from the current first-to-invent rule in March 2013.

Copyright strategy

• The start-up should ensure it has appropriate transfers of copyrights developed by employees and independent contractors.

• The start-up should consider registering the copyrights in its most important products to ensure they can be enforced in court on short notice and will qualify for statutory damages as well as legal fees.

• Employees should be sensitised to copyright issues to avoid unauthorised use of third-party software, manuals or other copyrightable materials.

Trademark strategy

• The most common strategies are: single trademark for virtually all products; a primary trademark used on all products, with secondary marks for certain products; and a trademark for each product with customers rarely knowing who manufactures them.

• Prior to adopting a trademark, it should be cleared to ensure another company does not have rights to the trademark both in the US and other relevant countries.

• Once cleared, the start-up should determine in which countries to protect the trademark.

• The start-up should ensure it has a trademark use policy to ensure the trademark is used properly and that the startup's use of its own trademark does not undercut the startup's ability to enforce the trademark.

• The start-up should ensure its trademark is not misused by third parties and that other parties do not adopt a confusingly similar trademark.

Trade secret strategy

• The start-up should have procedures in place to protect its trade secrets and be able to prove the use of such procedures in order to enforce rights in court. To enforce its trade secret rights, the start-up needs to prove it used "reasonable measures" to protect confidentiality. These measures can include employee assignment and confidentiality agreements, non-disclosure agreements and a marking programme.

• The employees should be trained to recognise and protect trade secrets.

 The trade secret programme should coordinate with the patent programme, because the issue of a patent will terminate trade secret protection.

Licensing strategy

• The start-up should carefully review inbound licences to ensure they include rights that are sufficiently broad to take into account the evolution of the start-up's product and the research necessary to develop it – the ability to sublicense these rights may be important, particularly for life science start-ups that will be partnering large pharmaceutical companies to manufacture the start-up's product. These licences, if critical, must also be transferable in the case of a merger or asset sale.

• The start-up should ensure its exclusive licences do not preclude it from exploiting its technology in other markets it intends to enter, and include appropriate minimum performance requirements.

• The start-up should carefully consider how much risk of liability it will accept through warranties and intellectual property indemnities to its clients.

 The start-up should establish a policy for the use of open source software in its products and ensure that it is followed.



Your brand of venturing

The benefit of marketing venture capital (VC) has always been an enigma to many, but is relatively straightforward – to showcase the value of putting capital to work to help innovation prosper. The ultimate goal is always the same: support entrepreneurs who are taking risks and putting their hearts and souls into work that will hopefully benefit millions of people.

The act of marketing a VC firm started when Kevin Fong, a partner at Mayfield Fund, hired me in 1989 as an adviser and a strategic marketing professional. Mayfield was interested in raising its brand image with entrepreneurs. We worked together to develop marketing programmes that made Mayfield stand out in the eyes of the entrepreneurs. Fong had a marketing background and so understood the power of building a brand and how that could help Mayfield and its portfolio companies.

As part of the strategic process, I conducted extensive research – a Swot, or strengths, weaknesses, opportuni-

ties and threats, analysis – to determine what challenges and opportunities existed for the top-tier venture firm. This perceptual research became the backbone in the development of the all marketing during our 15-year relationship.

From 1989 to 1995, Mayfield stood alone in its use of a strategic marketing adviser. Not many people knew about the cottage industry, as during that time there was only one reporter covering venture capital at a top-notch business publication, so there was a need for the industry to be explained. Mayfield was unusual in trying to do so and was

more transparent by educating reporters, entrepreneurs and analysts. It also began cohosting events with law firm Wilson Sonsini Goodrich & Rosati and investment bank Goldman Sachs, and spending marketing dollars to build its brand awareness.

Then the success of internet browser Netscape's initial public offering brought a whole new level of attention to its funding by VCs and sparked the first real wave of awareness of venture. It was clear as VC firms received an increasing amount of money it would turn from a cottage profession into an industry.

Today, US trade body the National Venture Capital Asso-

Jennifer Jones, founder, Jennifer Jones & Partners



ciation has about 100 firms in its strategic communications group that was set up in 2004.

Corporate venture marketing today appears similar to VC marketing before 1995. Few corporations think strategically about how they should be positioning themselves as they evaluate their corporate venturing programmes.

The backgrounds of the partners at corporate venturing units are similar to those at VC firms in the late 1980s – the firms are often staffed by corporate people, ex-VCs, financial investors and

entrepreneurs. Recently cor-

porate venturing groups have been learning from the VC industry by sponsoring confer-

ences and establishing programmes at universities, but it is unusual to see groups that recognise the benefits of marketing. Intel Capital has been an exception to the rule – it seems to have been more strategic in the last few years.

It seems the corporate venturing units have partly struggled to gain attention or

understanding from in-house marketing teams. Allying the strengths of established businesses with messages that resonate with entrepreneurial communities is a difficult task. Those that do so will grasp an advantage and often become the partner and investor of choice for entrepreneurs and others in a syndicate.

It seems that corporate venturing operations would be smart to observe what their VC brethren have done historically in marketing and try to apply some of that learning to their programmes.



Gaining a competitive edge

Corporations have used a variety of structures for their venturing programs. Although the structures used for traditional, independent venture capital firms (VCs) are quite established, the structure of corporate venturers has several traditional approaches but they are evolving rapidly. New models are being developed to allow corporations to use lessons from VCs to achieve their specific strategic goals.



A very common structure, particularly for new programmes, is investing directly from company treasury, with company employees managing the corporation's investment activities. However, this structure has some disadvantages and does not provide the flexibility of the other structures.

Although corporate venturers use a wide variety of structures, most of these options are variations on three basic types – investing directly from treasury, investing through a subsidiary holding company, and forming an independent fund based on the limited partner-general partner (investor-investment manager) structure used by VCs, in which the corporation is either the sole or a major limited partner.

Internal corporate venturing model

Most corporate venturing starts out in the form of an employee-run, wholly internal operation in which the corporation itself invests directly in the portfolio company. This model provides the advantages of simplicity while permitting the corporation to interact directly with its portfolio companies. This model has the advantage of a close relationship with the corporation and its business units. Boards of directors of portfolio companies are very interested in the ability of the corporate venturer to provide access to the business units.

Because it offers these kinds of strategic advantages, the internal model is frequently the initial structure and, for some corporations, the structure they continue to use. However, as we discuss below, this structure does not meet the needs of many corporations over time due to a variety of limitations.

For example, it does not accommodate the company's commitment of a specific amount of investment capital over a multi-year period and many VCs and portfolio companies are concerned about the ability of corporate venturers to invest over time.

Another potential disadvantage is that transactions may be lost if the corporation is not willing to provide a significant delegation of authority to the corporate venturers. The traditional approval process of many corporations will not meet the requirements of the fast-moving venture capital industry.

Finally, it is difficult in an internal model to provide compensation for corporate venturers that is similar to the compensation available within VCs – the carried interest model that provides a share of the returns from the investment. The differences in compensation can lead to the loss of corporate venturers to other parts of the venture capital ecosystem, such as angel funds, portfolio companies or VCs.

Investing through a subsidiary

Some corporations determine that they are better served by forming a subsidiary for their venture investing. This structure permits the corporation to organise investments in a single entity and allows a swifter, more streamlined investment decision-making process. This approach can also reduce the risks to the corporation of claims by a portfolio company by adding an entity with limited liability – either a corporation or a limited liability company – between the portfolio companies and the parent corporation.

However, neither the internal structure nor the subsidiary structure provides the flexibility to pursue strategic goals that can be achieved through an external structure based on some variation on the VC's limited partner-general partner arrangement.

New developments in venturing models

A corporation's strategic goals can often be best served by customised, non-traditional structures for corporate venturing funds.

For example, if a corporation organizes a fund more like a VC fund using a limited partner-general partner structure, in which the corporation is the sole or a major limited partner, then it can build credibility with potential invest-



ments and VCs because of the commitment of capital to venture investing over a number of years.

In addition a separate, independent structure may make the portfolio companies more comfortable about potential conflicts in the corporation's roles as both investor and, potentially, competitor. This structure can also be used to bring other investors into the structure and thus leverage the original corporation's investment.

However, this independent structure carries the risk that it will not maintain a sufficiently close relationship with the business units of the corporation, which is a critical advantage of corporate venturing. The corporation must be careful in this structure to integrate incentives to ensure this relationship remains close. If this relationship is properly implemented, it can help attract third-party investors to the fund.

More corporations are experimenting with these types of structures, particularly in the pharmaceutical and cleantech industries, which require large amounts of capital and time to develop technologies to be ready for the market. These markets have posed particular challenges for independent VCs because of the expectations of returns and the limited time period.

Recently, we have observed newer models that position

the corporate sponsor of the independent fund to reap a strategic benefit while simultaneously creating financial opportunities that appeal to third-party investors in the fund.

These new funds can be very attractive compared with VCs in these industries because of two features. First, the funds use the significant technical resources and expertise of the corporate sponsor to make the fund more effective in evaluating and working with portfolio companies. Second, some of these new funds are providing greater certainty about an exit, providing a formal purchase option by the corporate sponsor if certain milestones are met.

Although the development of these funds can be complex, they are exciting examples of corporations using VC concepts to forge new and creative methods of encouraging innovation.

The structures used for independent VCs are quite established, but corporate venturers are evolving rapidly. They are developing new structures that use lessons from the VC industry to achieve their strategic goals. As corporations consider how to structure their corporate venturing operations most effectively, they should consider how best to meet their strategic goals, and, in particular, the new options using a limited partner-general partner structure.

Best practices for corporate investors serving on boards of portfolio companies

One of the fundamental questions for a corporate venturer is how to manage the relationship with the board of a portfolio company. The role of the board is fundamental – the board of directors is responsible for managing and directing the business of the portfolio company.

The corporate investor has three options – that an employee serve on the board, that an employee act as a board observer or that there is no formal relationship with the board. The option selected will depend on the goal of the corporate investor and the importance of the portfolio company to the corporate investor.

Each board member is bound by certain fiduciary duties arising from court decisions and corporate statutes that obligate all board members to serve the best interests of the portfolio company and its shareholders. On the other hand, the role and responsibilities of board observers are entirely contractual in nature.

Courts have articulated the fiduciary duties of board members – and legislatures have subsequently codified them into corporate law – in order to regulate the extensive power of directors to influence corporate actions and to help ensure the directors work to serve the shareholders who own the portfolio company effectively.



By law, a director undertakes three broad fiduciary duties owed to the corporation's shareholders – a duty of care, a duty of loyalty and a duty to act in good faith. Failure to meet these duties can result in personal liability for the director's actions as a board member.

However, under the "business judgment rule", a director's decisions, even if they prove unwise or unsuccessful, have strong protection from liability if the director acts in good faith, uses common sense and acts in a manner he or she reasonably believes is in the best interest of the shareholders.

In addition, corporations frequently protect directors by indemnification obligations in its charter or bylaws,





indemnification agreements, directors' and officers' insurance, and, where permitted by law, provision in the corporate charter exculpating the director from personal liability for a breach of the duty of care (but not of loyalty), and limiting the scope of the corporate opportunity doctrine.

The director should have these agreements, provisions and insurance documents carefully reviewed by counsel because the corporation and directors may not have the same interests.

Failure to comply with these duties by a director can be expensive: Lexar Media secured a \$60 million judgment (the total judgment was \$460 million) against Toshiba Corporation for violation of fiduciary duties by the disclosure of Lexar trade secrets to SanDisk Corporation by a Lexar director appointed by Toshiba.

Service on a corporation's board of directors is a serious undertaking. It requires a thorough understanding of the duties and responsibilities imposed by law as well as an intimate knowledge of the portfolio company's business.

Fundamental decision:

board member or board observer

Before the corporate investor decides to designate a representative to serve on the board of a portfolio company, the following steps are advisable.

Consider whether the corporate investor's business goals require membership on the portfolio company's board or whether they can be achieved by contractual observer rights. Observer rights, which are either included as part of a formal contract or in a separate letter of agreement, typically provide for:

Access to management.

Access to books and records.

• Notice of and the right to attend board meetings and receive board materials.

• Protection of the portfolio company's confidential information.

If the corporate investor determines that board membership is important, it should conduct a due diligence review of the portfolio company and its management to ensure that:

• The management and existing board are experienced, diligent and advised by competent people.

• Financial statements are current and complete and there are adequate financial controls in place.

• The portfolio company is exercising good corporate governance – particularly important – through review of its certificate or articles of incorporation, bylaws and historical board minutes.

• There are no pending issues related to alleged or potential misconduct by the board or management.

Success for the board member

The following are best practices to ensure the success of

an corporate investor employee serving as a director.

The corporate investor ensure it designates an appropriate representative as follows:

• The representative must fully understand his or her duties as a director and have the background and available time to discharge those duties.

• The representative's duties at the corporate investor are such that the risk of inadvertent misuse of the portfolio company's confidential information is minimised. For example, the corporate investor should probably avoid designating the employee primarily responsible for the corporate investor's commercial relationship with the portfolio company, or an employee engaged in a business activity that may compete with the portfolio company – litigation between eBay and Craigslist is focused on this issue.

Actions to be taken by the representative

Once the representative is designated, he or she should be familiar with the duties of board service. The following practices will assist in assuring those duties are properly discharged.

It is important that appropriate procedures are in place to provide the directors with the tools they need to discharge their duties. For example:

• The board should hold regular meetings, at least quarterly and more frequently when circumstances warrant.

 Board materials should be distributed sufficiently in advance of board meetings so the materials can be carefully reviewed by all directors.

 Board agendas should follow a consistent pattern from meeting to meeting, focusing on key performance metrics so that performance can be measured consistently against key objectives.

 Board composition may vary depending on the stage of the company – as the portfolio company matures, more board members should be "independent".

• The board should hold periodic in-depth meetings that focus on long-term corporate strategy.

• A formal review of the chief executive's performance should be conducted at least once a year.

• The chief executive should communicate with directors between meetings. This dialogue keeps directors informed, makes preparation for meetings less difficult and avoids surprises.

 Independent, non-management directors should engage regularly in dialogue among themselves – in "executive sessions" at board meetings and between meetings.

In order to discharge their duty of care to the portfolio company, employees of the corporate investor serving as directors of portfolio companies should:

Diligently review board materials.

 Insist on careful and deliberate review and discussion of all important board actions.

 Avoid not only haste but the appearance of haste in making important decisions. Major decisions should be



made only after directors have had a full opportunity to digest all available information. Important and complex transactions, such as a sale of a corporation, will typically require more than one meeting.

 Ask questions and actively probe, review and test all information presented to the directors, judging its reliability and accuracy, in order to understand issues fully.

 Insist on a continual review of financial controls.

• Seek the advice of counsel and other experts where appropriate, and consider any potential bias of the person or group presenting the advice.

Dissent where appropriate.

• Ensure minutes and written board actions are accurate.

In order to discharge their directorial duty of loyalty to the portfolio company, employees of the corporate investor should:

• Ensure proper procedures are in place within the corporate investor for the protection of the portfolio company's confidential information and communications and ensure these procedures are properly documented in case of future litigation.

 Be alert to potential conflicts of interest involving the portfolio company and

the corporate investor, or other directors or their affiliates, and require disclosure of such conflicts and potential recusal from discussion and decision.

• Avoid the corporate investor usurping the portfolio company's "corporate opportunities" subject to any waiver of the doctrine permitted under corporate law.

Maintain portfolio company confidentiality.

 Ensure all material facts regarding corporate investorrelated transactions have been disclosed to the board, and avoid participating in deliberation or voting on transactions

Some definitions

Corporate director: The director is a member of the board of directors that governs the actions of the corporation and votes on matters before the board. His role is governed by corporate statute and case law. The director is a "fiduciary" to the corporation and its shareholders, which is the highest duty imposed by law.

Board observer: The observer is not a member of the board and does not have a vote. This role is determined entirely by contract between the corporation and the investor, or sometimes the observer himself. Unlike the director, the observer does not have fiduciary duties imposed by law, although he can agree to such duties by contract.

Statutory duties of the corporate director

Duty of care: This requires that the director act, in good faith, in a manner the director believes to be in the best interests of the corporation and its shareholders, and with such care, including reasonable inquiry, as an ordinarily prudent person in a similar position would use in similar circumstances. This duty can be breached if the director fails to take the time to understand a transaction and does not seek out the assistance of experts, such as investment bankers or lawyers, to understand the options for the corporation.

Duty of loyalty: This requires a director to make decisions based on the best interests of the corporation, and not any personal interest. It prohibits "self-dealing" by directors, who are required to have an absence of personal financial interest in the matters before them. This duty can be breached if the director has a personal, particularly a financial, interest in a decision.

Duty to act in good faith: This requires a director to act in a reasonable and deliberate manner and in the best interest of the corporation. This duty was created in the litigation between Walt Disney and its shareholders over the appropriateness of the termination of Michael Ovitz and his \$140m severance package. This duty can be breached by the director if he acts "with the intent to violate applicable positive law, or where the [director] intentionally fails to act in the face of a known duty to act, demonstrating a conscious disregard for his duties". where such disclosure has not taken place.

• Seek the advice of counsel on all matters involving potential conflicts of interest.

To provide additional protection to directors, those that are employees of the corporate investor should:

 Ensure all directors are protected by indemnification against personal liability for shareholder claims through appropriate charter and bylaw provisions;

• Ensure board members and officers have individual indemnity agreements.

• Determine whether the corporate investor's insurance would cover liability arising through such board service.

• Ensure the "corporate opportunity" doctrine is waived to the extent possible under corporate law.

 Consider the advisability of obtaining director liability insurance - which in the past was generally deferred until the company was preparing for an initial public offering but is now becoming increasingly common among private companies - and determine whether existing insurance coverage of the corporate investor extends to risks arising from the corporate investor's representative service on the portfolio company's board.

The board plays a critical role in the management of a portfolio company. Deciding whether to have the corporate venturer serve on the board

whether to have the corporate venturer serve on the board or act as a board observer is critical to determining the corporate investor's relationship with the portfolio company.

Although corporate investors have traditionally been reluctant to have their employees serve as board members, this reluctance is changing rapidly and corporate investors need to understand the consequences of such decisions and the best practices in serving on a board.



Questions corporate venturers should ask a VC

Direct investment alongside a venture capital firm

Will the venture capital firm (VC) stay in business and have money to invest in future?

Corporate venturers (CVs) need to make sure the VC that brings you a deal can support future rounds to the portfolio companies through exit, self-sustainability or profitability, as someone dropping out can send a bad signal. A shortfall of enough capital to reach a significant inflection milestone frequently dooms the portfolio company to failure.

While some CVs mistakenly believe all VCs have an unending flow of capital from limited partners (LPs) there are predictions the number of independent VC fund managers – called general partners (GPs) – will contract by between 25% and 50%.

I also think there is still too much capital in VC. At the height of the last bubble around the millennium more than \$100bn was raised in the asset class in a single year. Today, the amount committed to VC funds is just over \$15bn, which is still too much as there has been a five to 10-times capital efficiency increase in the money needed to start a business. What it took to build an information technology company in 2000 takes far less capital today due to a start-up's ability to use outsourcing, cloud computing, mechanical Turks and open-source software. \$500,000 now goes as far as \$5m did 10 years ago.

Too much capital affects the success of the ecosystem. This excess of capital causes premiums to be paid – effectively valuing

the company too highly too early in its life, investments into incremental rather than disruptive innovation and too many copycat companies occupying the same space. This ultimately reduces the return on investment that traditional LPs can expect, or have received, from a long-duration, Erik Sebusch, partner, CMEA Capital



risky asset class such as venture capital.

With a negative annual rate of return on US VC funds over the past decade (the average VC has lost money), few VC firms have generated the risk-adjusted returns institutional investors are looking for and so capital is moving away from venture capital as an asset class, leading to the inability of many VC firms to raise future funds.

Secondaries firm Coller Capital's Global Private Equity Barometer Winter 2010-11 of 120 LPs found two-thirds (64%) said only a small number of VCs worldwide would show "consistently strong returns over the next decade". A fifth (22%) said "no venture capital firms will be able to deliver consistently strong returns", Coller's barometer added. If this is the case, why would an LP invest in the area? The answer is it would not, as evidenced by the recent speed-dating of investors to VCs in the US that revealed more than 50% of LPs said they had no desire to meet a VC.

Given this slow decline in fundraising and consolidation of the industry, many VCs will lack sufficient reserves to support future investments. This is just one of the many reasons the best technology does not always win.

Some of the most important questions a corporate venturer should ask are:





What is the size and vintage year (when it was raised) of the fund you will invest from?

• How much capital has been drawn (invested in deals) and how much is held in reserves?

• For this investment in a company, how much capital are you holding in reserve for a follow-on investment?

These three questions will reveal how much dry powder, or money, a VC has and how long it can support the investment from a fund, although the next question can affect this.

Do you typically do cross-fund investing?

This question asks if the fund invests monies from one fund in the beginning and then another fund in future rounds. This can identify whether it is likely to have a neverending flow of capital, but it is quite rare the LPs like this – it can cause conflicts of interest between two different funds

within the same VC. If the firm has set a precedent of doing such crossover investing in the past, then it is likely its LP base has approved of this.

This dry powder argument, however, is only a piece of the puzzle, since the people in a GP can change over time and the personal dynamics of who does which deal can be important.

Support, clout and control for a deal come from a VC's investment committee, or sometimes one founding managing partner.

Who is on the fund's investment committee? Who on that committee supports the investment in X? Who is the most reluctant? Who has the most reservations?

This is key to getting to

know your syndicate partner's fund dynamics. Can the person proposing the deal influence his partners and what kind of push-back does he currently get from people on the investment committee? Partnerships easily discontinue support for an investment in a poor cycle, especially if they did not like it in the first place. Understand your contact's authority in his firm and the support his firm gives your shared investment.

What other VCs do you feel are experts in this space

and who do you think is an expert like yourself?

Understanding who are the sector experts in the VC industry will help you in the due diligence process. Creating relationships and networks with other VCs in that particular space is helpful in obtaining historical data, as this is a close-knit circle of people with plenty of overlap in reviewing deals. Most likely this is not a proprietary deal and someone has looked at it before.

Get to know those other VCs in this space as they may know a lot about the firm with which you are going to coinvest and may have insights into the partnership that you do not have. These relationships could tell you more about the partnership, board and portfolio companies and makes a more thorough diligence process.

Indirect investing as an LP in a VC fund

Direct investing can be tricky, and those without a network, a track record or previous knowledge of the industry are easily taken advantage of and are perceived as "dumb money" even if CVs themselves think their brand valuable. CVs is beware - this is not automatically the case.

Don't get fooled about that brand value, as valuable as it may seen to every-

one internally at your firm. There is a reason VCs are typically reluctant to have CVs in earlier rounds.

Inexperience and the cyclical nature of CV plans almost always require them to pay a premium to invest in a VC's portfolio company, if they can get a seat at the table in the first place.

But VCs are, depending on terms, conditions and sector, more open to a CV if it brings insight to customer needs, pilot testing, revenue as a customer, a distribution partnership or potential as an acquirer – especially if the entrepreneur is likely to need plenty of funding, as in the clean-tech sector (see Rachel Sheinbein's article in October's Global Corporate Venturing on why clean-tech start-ups need to partner big companies).

Another option to add value and get a seat at the deal table is to write a bigger cheque, through being an LP in the VC's fund. CVs can also learn a lot about VC investing by committing to a VC fund before they starting investing directly in entrepreneurs themselves.

My former employer, parcel delivery company UPS, committed to VC funds in the early days of its CV unit in order to understand the business and obtain dealflow.



These commitments allowed for deal access, information rights, onsite working relationships, as well as a transfer of knowledge. It is also valuable when you are region or specific sector focused, since there are many international and sector-specific funds available. Though this may be true, there is definitely a price to pay, which leads me to my next questions.

What is your fund's investment minimum?

• When are you going to raise your next fund and would you be interested in us becoming an LP?

• Does your LP base include any corporate – off the balance sheet and not pension – strategic monies? Can you describe that relationship and can I talk to them?

This should be music to most VCs' ears, particularly since fundraising is very hard at the moment. The price tag for entry into VC funds is usually a \$5m to \$10m commitment for regular institutional LPs, such as pension funds, life assurers and funds of funds, yet might be more for a CV if it wants more than quarterly reports on a set of blind pool assets – investments decided by the GP that may be of no strategic interest to the CV. If the VC has a sectorspecific focus this may not be as big a problem, but sectors can include a wide range of deals.

VC's Understanding the industry, its network, and how it underwrites deals is valuable information when getting off the ground as a CV. It is not unreasonable to ask for office space at a firm for a \$10m \$20m investto ment directly into a VC fund or to attend the Monday morning partner meetings to obtain access to all its dealflow and analysis.

Even the deals they turn down might be interesting to you. This is a smart option for groups just getting into the CV business and a good opportunity for a firm to support someone spending the first six months after commitment working from inside the VC firm.

If a CV can convince the private equity portfolio manager at your parent's employee pension plan to give you information and guidance in diligence for various managers that, too, could help. The pension plan's private equity portfolio manager can offer you access to databases which benchmark and track VC performance.

They can also give you valuable guidance during the

due diligence process. I would personally be a bit reluctant if your pension group uses a fund of funds or a consultant for its fund picking as these groups have very little understanding of a CV's motivations. Seek out the individual in the pension group who has several years' experience of investing in VC funds.

However, due to regulations governing corporate pension plans there are limitations to the transfer of information. But if the pension group finds the VC fund interesting it might invest an additional \$10m to \$50m alongside the commitment from the CV, thereby putting you very high on that VC's priority list.

With few VCs generating significant returns, a thought-

ful CV can be particular in selecting the right firm or even the individual riaht to back. An individual might make money while his firm does which. not, if you then want to make selected direct deals, can provide valuable insights. This lesson I learned from my move from UPS's CV unit to its pension group. This leads me to my next question.

May I obtain your firm's updated historical – inception to date – deal attribution broken down by partner, sector, geography and portfolio company? Do you have a due diligence questionnaire (DDQ) you supply to LPs?

These questions are critical and rarely asked unless the investment in the fund is significant. There are some exceptions with regard to the couple of successful firms that are consistently oversubscribed. They have a take-it-or-leave-it attitude to their LP/GP contract – the limited partnership agreement.

The deal attribution process and review of their DDQ is indicative of sophisticated pension investors, and can give you insights far exceeding even what other VCs could get. I was shocked to find out that there are some high-profile VCs that have not generated a return of principal back to their investors over their entire venture career. Find those that have returns, not just great personal brands.

I hope these questions are helpful. They are just the first of many questions that CVs rarely ask, but will get you going in the right direction. Do not hesitate to contact me – *erik@ cmea.com* – if you agree, disagree or want to chat further. CV is a passion of mine and a smart way for corporations to get access and insights in the technology space.



Eight tips for wise investing

After decades of on-again, off-again forays into corporate venturing, corporations have turned their engines on again. Last year, technology-oriented corporations invested \$1.9 billion in venture capital, up from \$1.35 billion in 2009, and this brisk 40% growth rate is on track for a repeat performance this year.

The corporate world realises it has little choice but to be a venture capital player. Whether it is a hot new mobile or social media application, better ways to expand internet infrastructure or the latest medical device or healthcare information technology, start-ups are far more likely than established companies to be in the vanguard of change.

So corporations have to pursue investments in entrepreneurial companies as outside reasearch and development (R&D) labs and thereby introduce new technologies into their DNA. Combining the efficiency of start-up R&D with the strength of corporate branding, distribution and support can be a significant win-win for both the corporation and the start-up.

Corporations have to play the game right, however. If they are to be successful in venture investing, they have to time their investments well, deliver on their commitments, add value, check their egos and make sure their bureaucracy does not stifle the start-ups in which they invest. With this in mind, here are eight tips that corporate venture capitalists must take seriously:



1 Know when to invest. In most instances, the best time to invest in a start-up is when it has actually developed a product and is ready to ship it. This is when start-ups can best leverage corporate distribution channels and the corporation's installed customer base to boost sales.

Periodically, corporations do invest successfully at an earlier stage. But the odds are not good because the startup's business model is often still evolving, requiring a lot of coninuous hands-on work and give and take. This very early investing is most often the domain of traditional venture capitalists who focus on early-stage investments and have more experience and resources to support companies at this stage of development.



Robert Ackerman, managing director and founder, Allegis Capital



2Make synergism a priority. Corporate culture is a lot different from start-up culture. Corporations measure themselves by their brand recognition, revenues, stockmarket value and number of employees. And they are cautious. Start-ups are exactly the opposite. They are small, fast, efficient, untethered and irreverent.

Understanding and working through the cultural mismatch is often the biggest challenge in corporate/start-up relationships. Corporate venture investors need to be able to smooth the inevitable friction associated with these two disparate cultures working together.



Be a long-term partner. The corporate venture investor community has a track record of jumping in and out of venture capital. Venture investing is an environment where reputations are built over extended periods and where predictability and trust are the watch-words to help manage risk successfully. If you wanted to be treated like a trusted partner, you will need to be around for the long term and work through the inevitable tough times that come with investment cycles.



This is where investors prove their mettle and earn the respect of their co-investors. Investors that move in and out of the market in search of short-term gains or in response to their own economic cycles are perceived to be "hot money" and ultimately are not wanted. If corporate venturers do not stay the course they will be viewed as unreliable investors that increase, rather than lower, risk.



4 Do no harm. A small move magnified by the mass of a large corporation can have a hugely disruptive impact on a small start-up. A corporation needs to understand the implication of its actions on its start-up partners – negative as well as positive. Young start-ups often chose to partner large corporations as a way of accelerating their growth, erecting competitive barriers to entry, lowering capital requirements and derisking their operating plan. On the flip side, a corporation's action can, even inadvertently, have a severe negative reaction on a small start-up partner.

Building a reputation as a true value-added investor is not an easy thing for a corporate investor, but it is crucial. A successful reputation built from years of successful work with young start-ups can be quickly undone when a corporation takes an action that puts the start-up partner at risk. Bad news spreads faster than good news.



5Add value beyond capital. Capital is a commodity – though an essential one. A successful start-up will usually have no problem raising critical investment capital from the venture community. To be successful, corporations should focus their investment activities by providing critical resources that are expensive and difficult to develop – market knowledge, access to distribution channels and customers, brand leverage and support networks.

Delivering resources that can lower the risk and improve the magnitude of success for a start-up is the key to being perceived as a true value-added investor – one that will be welcomed by start-ups and venture capital investment syndicates alike.



6 Focus on managing internally, as well as externally. 6 Corporate venture investments often fail due to a lack of internal support. If a corporation funds a new research programme, it takes on a life of its own because an internal ecosystem is built to protect the project. But an ecosystem seldom develops to support a start-up investment.

People in R&D typically view the start-up investment as dollars they would prefer to spend and the chief financial officer views the start-up as a source of financial volatility he or she cannot control. Corporate venture capitalists must work to enhance the internal visibility of the start-up and build the critical linkages into their corporate DNA.



7As part of internal management, make it a priority to secure executive level and line-of-business support. To mitigate the tendencies cited above, corporate venture capitalists must spend a lot of time building supportive constituencies inside corporate walls.

They should also recruit a line-of-business sponsor for the start-up, perhaps with a spot on the start-up advisory board, and find multiple ways to measure and communicate the start-up's "soft" value until its bigger strategic benefits begin to materialise.

Corporate VCs should not "pound their chests". In fact, they should be humble. They should not expect special treatment and should avoid boasting about their company's brand, stockmarket valuation or size.

Too often, corporate venturing investors fail to appreciate that Silicon Valley innovation is about two people in a garage trying to reinvent the future. Established companies, at least to some extent, are viewed as yesterday's news. Approaching the corporate/start-up relationship from a position of "equals" is likely to generate greater returns over the long term.



Expectations for the year

US-based venture capital (VC) firms said they would invest more and chief executives (CEOs) of portfolio companies are also increasingly confident about the year, according to the 2011 Venture View survey, conducted by the NVCA and data provider Dow Jones VentureSource.

The annual Venture View surveyed more than 330 VCs in the US and 180 CEOs of US-based venture-backed companies in late November and early December.

Mark Heesen, president of the NVCA, said: "At this time last year, the VC industry was cautiously optimistic. While the industry will continue to evolve, and likely contract, the companies we fund will continue to grow, innovate and drive the US economy."

More than half (51%) of US-based VCs expected their investment activity to pick up this year while 24% said it would remain the same. CEOs were even more hopeful – 58% predicted an increase in venture investing and 64% planned to raise a financing round this year. However, the financing round is not expected to be through a flotation. Just 4% of CEOs said they expected to start an initial public offering (IPO) this year. However, the public stock markets are regarded as an important exit route – 37% of CEOs said they were considering selling to an already-listed company.

Technology companies are expected to fare best in the exit market, according to a majority of VCs, with predicted increases in both volume and quality in IPOs and acquisitions.

Fundraising was cautious, split about evenly between "increase, decrease or hold steady", while three-quarters said the investors – limited partners (LPs) – would gain favourable terms. But the US reputation means nearly half of VCs expected more foreign LPs to commit to their funds.

While 53% of VCs have no plans to invest in start-ups outside the US this year, those that do viewed Asia as the prime target. Of the VCs planning to invest outside the US, 26% were looking at China and 18% were interested in India, with western Europe at 19% and Latin America at 11%.

Europe-based VCs were also cautious about their region. According to Belgium-based trade body the European Private Equity and Venture Capital Association, 41% of VC respondents to its survey expected an increase in the investment level, and 26% predicted a decrease, although just a fifth said fundraising conditions would improve.

For a sustained recovery in investments, most respondents consider that a stable and strong growth in European Union (EU) gross domestic product (GDP), together with a better exit outlook is needed. Last year, the aggregate GDP of the 27 members of the EU grew by 1.8%, after a 4.2% decrease in 2009, and is expected to hit 1.7% this year.

In Asia, accountancy firm Deloitte's survey of 245 CEOs at Asia-Pacific's fastest-growing technology companies found 54% predicted strong growth for the year, while 43% expected weak or negative growth.

But venture and public funding for businesses was expected to be less important this year, Deloitte said.

Outlook for investing

Corporate venturing units are becoming more positive about investing this year, although the range of things they worry or are optimistic about is diverse.

A snapshot survey on behalf of the US-based trade body National Venture Capital Association (NVCA), which was conducted by the Center for Private Equity and Entrepreneurship at the Tuck School of Business at Dartmouth University in 2010, found 10 of the 19 respondents* said they expected to increase the amount of capital invested by more than 20% over the next two years. However, only nine said they would increase the number of deals by more than a fifth in this time, while 40% planned to be the lead investor in significantly more deals in the next two years.

The confidence was also spreading to companies yet to launch a corporate venturing unit formally. A third of respondents to the survey said corporate venturing was becoming standard at Fortune 500 companies – the biggest listed companies in the US – as a source of strategic and/or financial value, while nearly the same number said there would be a merger of corporate venturing and the broader innovation team, similar to integration at US bank Citigroup and insurer Hartford.

The remainder said there would be little expansion in the number of corporate venturing groups but those that remained would have more capital and influence.

The biggest issues facing corporate venturing units for the next few years remained gaining or maintaining the parent's financial and operational support and communicating their sustainable long-term value creation, the survey found. After these two main hurdles, the other issues included balancing financial and strategic returns, retaining employees and paying them, and learning how to co-invest and leverage insights from their dealflow for the parent.

Similar to US venture capital firms (see box opposite), corporate venturing units said the US would be the most promising country or region for the next few years, followed by China.

*26 respondents completed the survey but not all answered every question.

Which is the most promising geographic region/country for the next several years?

US	52%
China	22%
Brazil	9%
India	9%
Israel	4%

Source: NVCA; Tuck School of Business





Chasing the rabbit: deal origination best practice

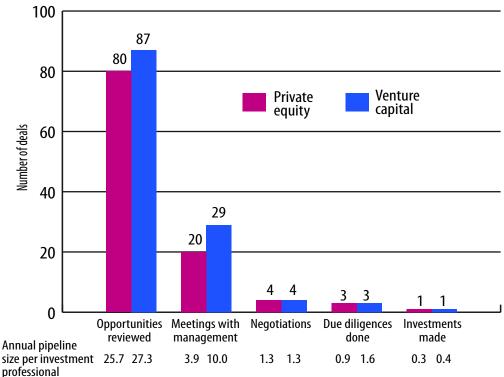
Would you invest in a company that sold only to one out of 80 leads? In fact, you have already made that investment – in your corporate venture group. According to our data, the median private equity and venture capital investor in private companies reviews more than 80 opportunities in order to make 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 labourintensive 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.

Last year we 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, partner, ff Venture Capital, 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 recommen-

Median pipeline size necessary to close one deal



and relevance of dealflow. Build a specialised outbound origination programme. Growth investors with dedicated, large-scale

dations to improve the volume

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 midmarket private equity firm, has developed a broad network of 24 senior, focused deal originators to produce top-quartile results in eight of their last

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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 oppor-2 tunities 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 coinvest 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.

3Use 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. Navon Partners has built 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 capitalists blog, according to Jeff Bussgang, 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. **5** 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

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Will the robots take over from human instinct?

Venture investors appear to defy the dominant scientific approaches

Like it or not, we live in a quantitative world, and it gets more so every day. Manufacturing defects are measured to 99.99966% accuracy. Automated trading algorithms evaluate businesses, prices, alphas, betas, libraries of ratios and make trades based on picoseconds of marginal arbitrage. In 2006, an estimated 40% of trades on the London Stock Exchange were conducted by robotic intelligence. US estimates are closer to 80%.

In this world of empiricism, data and calculation, the job of a venture investor seems an anomaly indeed. While there are some exceptions, the majority of venture investors allocate billions of dollars every year based on little more than experience and gut intuition.

This is not, in any way, to detract from successful investors – the ability to pick winners, wrestle out a deal and drive others towards a central direction can require tremendous talent and skill. Rather, the point here is merely to pose a question. Given the dollars at stake and lives in the balance, will venture investing inevitably evolve in a more empirical direction? Will there be a robot uprising?

Once upon a time, marketing and advertising were matters of visionary intuition and interpersonal sensitivity. Yet today statisticians are increasingly replacing marketing MBAs, and software developers are taking the place of bygone "mad men." If you want to know what makes lefthanded, Republican, blonde, female smokers buy pink purses in Nebraska, you are increasingly better off writing a few lines of code rather than hosting a living room focus group.

While intuition-based venture investing works for some, most will agree it usually fails. Investors spend inordinate amounts of time screening deals, only to see around 90% fail (on a good day). Industry-wide venture capital returns in the US over the past 10 years are now negative. Not only is venture investing falling short of limited and general partners' expectations, but it also – by necessity – excludes the gross majority of startups. Fewer than 1% of startups attract venture investment in any given year. Fewer than 95% of businesses attract any equity investment at all.

A common counter-argument to empiricism is that venture investing is inherently unquantifiable – too unpredictable, too subtle – so as to be forever exempt from the Thomas Thurston, president and managing director, Growth Science International

purview of robots. Yet is venture capital really more multivariate than manufacturing, biology, chemistry or physics? What makes venture investors immune? Why are they so special?

The field of psychology is a worthy analogy. Equally amorphous and intangible, psychology is divided between clinical methodologies (relying on human judgement and subjective analysis) and mechanical methodologies (relying on statistics, algorithms and other more objective tools). More than 136 studies have tested the relative accuracy of both methods going as far back as the early 1900s, almost invariably concluding that mechanical methods are more consistent, accurate and yield higher-quality results¹. Even in Blink², a book often held up in defence of intuition, author Malcolm Gladwell goes to lengths to call out the limitations of intuition, such as inaccuracy, wishful thinking, knowledge inaccessibility and the mind's ability to play tricks on itself. Along these lines it was found that even simple checklists, the most basic of objective tools, reduced hospital surgical mortality by around half³.

With so many lives and dollars at stake in the realm of venture investing, can empirical methodologies lend more of a hand? Should we demand more than "gut feeling"? Could society benefit from a little more robot uprising in venture capital?

Notes

- 1 Grove & Meehl, 1996: 'Comparative Efficiency of Informal (Subjective, Impressionistic) and Formal (Mechanical, Algorithmic) Prediction Procedures: The Clinical-Statistical Controversy', in *Psychology, Public Policy, and Law*
- 2 Gladwell, 2005: *Blink: The Power of Thinking Without Thinking*, Little, Brown and Company
- 3 Haynes, Weiser et al (2009): A Surgical Safety Checklist to Reduce Morbidity and Mortality in a Global Population, in *The New England Journal of Medicine*, Vol 360: pp491-499



How to retain the value in portfolio companies

Corporate venturers often invest in start-up companies to identify businesses to buy later. In fact, according to a paper by David Benson of Brigham Young University and Rosemarie Ziedonis of the University of Oregon, 20% of acquisitions made by the companies with the largest corporate venturing operations were in businesses in which their venturing arms had previously invested.

Benson and Ziedonis find a surprising pattern in these purchases. In their article in Journal of Financial Economics, Corporate venture capital /and the returns to acquiring portfolio companies*, they report that when companies purchased start-ups in their venture capital portfolios, shareholder value was typically reduced by \$63m.

This did not happen when the companies bought businesses in which they had not invested. In these acquisitions, shareholder value typically increased by \$8.5m.

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Why was shareholder value reduced

when the companies purchased start-ups in their corporate venturina portfolios? The authors examined whether the acquirers overbid because of competition, problems in firm governance or excessive chief executive selfconfidence, and did not find evidence to support any of these explanations.

Instead, the authors

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companies by autonomous corporate venturing units were less biased than those of internally-housed programmes and the autonomous operations did a better job of moni-

toring investments. The authors attribute the superior approach of the more independent units to their greater

their greater exposure to dealflow and deeper finance experience.

> In short, this research suggests that corporations

seeking to acquire start-ups

in which they make corporate venturing investments should consider setting up their venturing operations as independent business units.

* Benson, D, and Ziedonis, RH, Corporate venture capital and the returns to acquiring portfolio companies. Journal of Financial Economics (2010), doi:10.1016/j. jfineco.2010.07.003. The full paper requires subscription at www.sciencedirect.com or contact the authors: Rosemarie Ziedonis rmz@lcbmail.uoregon.edu and David Benson david.benson@byu.edu

found that corporate venturing programmes housed in separate organisations tended not to experience a loss of shareholder value in their portfolio company acquisitions, but those programmes housed within the main organisation did. This pattern suggests the explanation for the decline in shareholder value lies in the accuracy of the investors' evaluations of the target companies.

Benson and Ziedonis found the valuations of portfolio



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