Monthly European Technology Venture Capital Bulletin December 2010

The Go4Venture Monthly Venture Capital Bulletin is a publication commenting on the latest results from our European Technology VC Headline Transactions Index®.

Go4Venture's European Tech VC Headline Transactions Index is based on the number and value of transactions reported in professional publications. The Index is compiled on a monthly basis as an early indicator of the evolution of the market for venture capital funding for European technology companies.

For more details please refer to the Methodology Note available at www.go4venture.com/research/hti.htm.

About Go4Venture

Go4Venture Advisers LLP is a London-based corporate finance advisory firm focused on providing European technology entrepreneurs and their investors with impartial advice to help them develop and execute growth strategies.

Our services encompass:
- Financing strategies
- Buy and build strategies
- Exit strategies (trade sale and IPO advisory)
- Strategic advisory and valuation

We are particularly well-known for our international equity private placement services, where we have developed a reputation second to none in Europe among international VCs.

Further information is available at www.go4venture.com.

Go4Venture Advisers LLP is authorised and regulated by the Financial Services Authority (FSA).

Dear Clients and Friends,

Please find attached the December 2010 edition of Go4Venture's Monthly European Technology VC Bulletin, including the latest results from our proprietary Headline Transaction Index (HTI) which tracks technology private financing deals as reported in the press.

As it happens, **we finished 2010 on a high note** with the largest ever recorded single HTI transaction and overall 2010 total numbers well ahead of the year before: close to +40% by value resulting in a total amount invested equivalent to 2008 - as if 2009 had just been a blip.

As we've been chronicling over the last year, these upbeat numbers however very much hide a changed landscape. Concisely, **European innovation financing is alive and (reasonably) well, but the European VC industry is not in great form today**. European VCs may now have the level of ambition required - seeking superior returns rather than downside protection for its own sake - but they do not have the means of their ambition. In short, European VCs are in a rut where past poor performance makes LPs reluctant to commit to the asset class when opportunities are actually knocking at the door.

To illustrate, let's take the $300mn investment in Plastic Logic (as part of a broader commitment rumoured to be $650mn). On one hand, a great victory for European technology, on the other hand somewhat of a muted day for European venture capital. In a way this transaction highlights much of the travails of European VC:

- First, the investment is not by a VC, but by a state-sponsored fund: in short the slack from VCs is taken up by players from outside the industry.
- Second, the majority funds come from emerging markets (Russia). In our view this is an indication that not only jobs, but now innovation is also moving East. And wait until China really gets into gear on the IP front!
- Finally, the little VC element that is in the deal is actually from the US. Although Plastic Logic was born and bred in Europe, nurtured by Amadeus Capital (€1bn under management), it is a US fund (Oak Capital, €7bn under management) which is picking up the (potential) riches with a whopping 52% stake in the business thanks previous investments and continued support an additional $50mn investment in the latest round. Even a European Tier 1 fund such as Amadeus just doesn't have this kind of firepower to prevent ownership dilution of their best companies.

On the other hand, **there are plenty of good reasons to be optimistic**:

- The closed IPO scene and not so healthy M&A market are creating new opportunities for European VCs. European funds - now largely refocused on smaller technology private equity transactions - are going to produce some stellar results in the middle of this decade and this will eventually feed a renewed interest from LPs. In December, if one includes 'Series A' which are first rounds of established businesses, late stage represents 5 of this month's 6 large HTI transactions.
- Markets outside the two major countries (UK and France) will start to unexpectedly produce good returns. Germany will eventually re-emerge and take its due place in VC land, spurred by a new wave of internet successes. Smaller countries such as Spain (featured twice in December alone – via Nauta Capital invested in Abiquo and Adara Venture Partners in Cambridge Broadband Networks) will come up with unexpected success stories.
- Some of the newer and exciting investment areas are playing to Europe's strength, e.g. cleantech or even internet, where localisation is not always as big a driver as in, say, software. For an example of old tech turning into cleantech see Ducatt (featured in this issue), a traditional bulb manufacturing business from Belgium re-engineered for solar glass production.

Other **revival examples in December** included:

- New funds being set up or strengthened, such as Imperial Innovations launching a £140mn rights issue to continue financing spin-offs from London, Oxford and Cambridge; or Danish Pension fund ATP being the sole backer to Via Ventures' second fund of €130mn to invest in tech start-ups in the Nordic region.
- Corporates getting involved, such as Suez Environment launching a €50mn waste-management focused venture fund.
- Even exits, for instance eBay buying Brands4friends for $200mn in cash (hot on the heels of Amazon's purchase of BuyVIP for $100mn in October 2010).

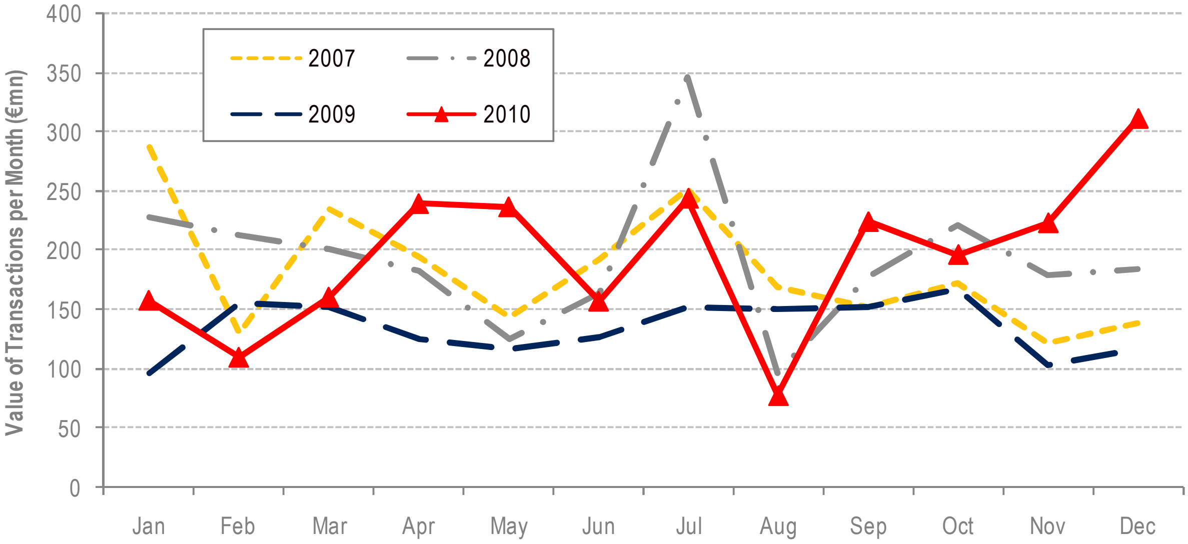
So there is an air of renewal in the European VC market, spurred by a new generation of General Partners coming in and the old guard slowly fading away. The challenge is to close the old lines invested in the 2000s with no clear exit prospects. For this European VCs will have to **learn from private equity the art of the direct secondary among themselves**, even if, in the case of VCs, valuation metrics are not as clear as in cash-flow based businesses. No doubt that the growing element of secondary in primary fund-raisings (the so-called staple deals) will open the way to a nascent direct secondary market. Again the US is showing the way, as exemplified by Groupon where $350mn of the company's December 2010 $500mn financing is earmarked to buy stock from founders and early investors. Not bad for a two year old company!

Enjoy the reading. Please direct any questions or comments to vcbulletin@go4venture.com. If you do not wish to receive future HTI updates from us, please send an email with the title "unsubscribe" to vcbulletin@go4venture.com.

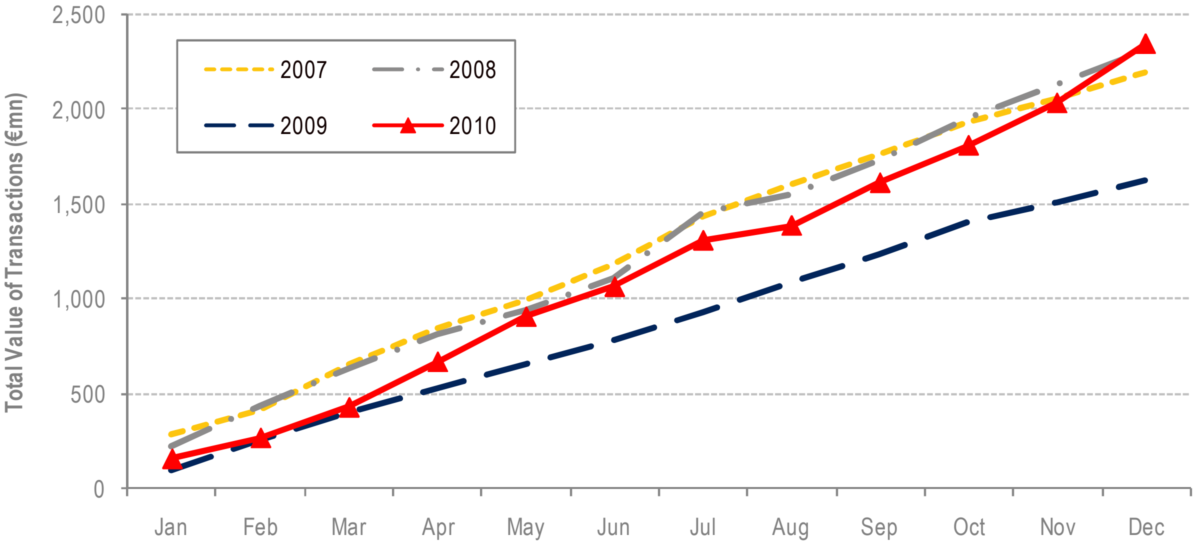
The Go4Venture Team

Investment Summary

Go4Venture HTI Index by Deal Value



Go4Venture HTI Index by Cumulative Deal Value



December		2009	2010
Landmark Deals	#	1	2
	€m	50.0	246.9
Headline Deals	#	2	3
	€m	26.5	28.0
Small Deals	#	15	13
	€m	41.1	36.9
All Deals	#	18	18
	€m	117.6	311.9

Year-to-Date		2009	2010
Landmark Deals	#	8	18
	€m	277.2	768.7
Headline Deals	#	60	62
	€m	656.0	714.4
Small Deals	#	237	278
	€m	691.3	864.8
All Deals	#	305	358
	€m	1624.5	2,347.9

Large Headline Transactions Summary

(> £5mn / €7.5mn / $10mn)

Company	Sector	Round	€mn	Description	Investors
Plastic Logic (UK) www.plasticlogic.com	Hardware	Late Stage	226.9	Developer of plastic electronics technology.	Russian Corporation of Nanotechnologies (RUSNANO)
Ducatt (Belgium) No Website	Cleantech	A	20.0	Buyout of Emgo's incandescent light bulb factory to retool for solar glass production.	Capricorn Cleantech Fund, LRM
Cambridge Broadband (UK) www.cbnl.com	Hardware	Late Stage	12.5	Provider of carrier-class point-to-multipoint microwave transmission equipment.	Accel Partners, Adara Venture Partners, Amadeus Capital Partners, Samsung Ventures Europe, TVM Capital
PE International (Germany) www.pe-international.com	Software	A	8.0	Provider of software and consulting services to assess product and corporate sustainability.	GIMV, Siemens Venture Capital
Abiquo (Spain) www.abiquo.com	Software	B	7.6	Provider of management software for cloud computing infrastructure.	**Balderton Capital**, Nauta Capital, Eurecan
Performance Horizon Group (UK) www.performancehorizon.com	Internet Services	A	5.9	A developer and provider of online performance marketing solutions.	DN Capital

Source: Go4Venture

Key
Bold indicates lead investor(s)
* Internal round
** Led by existing investors

Company	Sector	Round	€mn	Description	Investors
Plastic Logic (UK) www.plasticlogic.com	Hardware	Late Stage	226.9	Developer of plastic electronics technology	Russian Corporation of Nanotechnologies (RUSNANO)

PLASTIC LOGIC

Plastic Logic (**UK**), a developer of plastic electronics technology, raised $300.0mn (**€226.9mn)** in **Late Stage** funding from new investor **RUSNANO**, and existing investor **Oak Investment Partners** which provided $50mn of the total.

Founded in 2000, as a spin-out from the Cavendish Laboratory of the University of Cambridge, Plastic Logic's technology produces semiconductors made of plastic using a process similar to ink-jet printing. E-paper - a thin, flexible and shatterproof electrophoretic display with a low-energy footprint that looks similar to paper - caused particular excitement.

Plastic Logic last featured in our August 2008 bulletin with a €33mn internal round led by Amadeus Capital Partners and Oak Investment Partners with ten other corporate and venture investors participating. This money was to be used to launch the company's first product - the QUE proReader - early in 2009. After multiple delays, in August 2010, the company finally cancelled its QUE proReader product. Plastic Logic has a long history of delayed product launches. Early on the Economist reported that the company would ship product in 2004. Plastic Logic did enter into an agreement to develop cell-phone displays in 2004 - in partnership with Siemens which became an investor early in 2005 - but no product was ever launched.

This is the largest ever single transaction in the history of the HTI. We decided to record it as $300mn because this is the size indicated for the initial investment. However in a statement RUSNANO confirmed they have made a total commitment of "close to a billion dollars" ($650mn according to industry sources).

In many respects, this is an extraordinary deal. Firstly, this is clearly a platform technology which missed its killer app. The e-book reader market was shaken by Apple's iPad which has set colour as the new standard. Production teething troubles didn't help either. Second, as a platform technology, this investment seems well beyond the scope of traditional VCs. Or is it? UK-based initial supporter Amadeus (€1bn worth of assets under management) didn't participate in this round and may have backed the company too early. US-based Oak Capital (€7bn under management), which came in for the second round, is investing another $50mn and remains the largest shareholder with a 52% stake whilst RUSNANO ends up with 34%. It looks like a good deal for Oak - demonstrating once more that timing is key in successful investing.

What is really new here is a VC's ability to leverage cheaper state-sponsored money from emerging markets. Apparently Russia, China and Middle Eastern investors fought over the investment which will result in a second production facility being built just outside Moscow. According to CEO Archuleta, Rusnano won because they share Plastic Logic's vision "for the next five to 20 years".

State-backed RUSNANO was established in 2007 to support Russia's nanotechnology industry through co-investment. Its current CEO is Anatoly Chubais, the Russian politician and business manager who was responsible for privatisation in Russia as an influential member of Boris Yeltsin's administration. In its last financial year, the corporation received 634 requests for investment, of which 54 were approved and have received or are due to receive co-investment of 87bn rubles (€2bn). The breadth of RUSNANO's investments is much wider than its name would suggest, with investments to date spanning cleantech, nanomaterials, medicine and biotechnology as well as other engineering and infrastructure projects.

Company	Sector	Round	€mn	Description	Investors
Ducatt (Belgium) No Website	Cleantech	A	20.0	Buyout of Emgo's incandescent light bulb factory to retool for solar glass production.	Capricorn Venture Partners, LRM

Ducatt (**Belgium**), a solar glass start-up, received **€20mn** in a **Series A** round from **Capricorn Venture Partners** and **LRM**. The money will be used to re-tool an existing production facility belonging to Emgo, a leading manufacturer of tubing products and glass bulbs which is jointly owned by Philips Lighting and Osram and is under pressure following the EU's ban of incandescent bulbs from 2012.

Ducatt is a new company setup by two members of Emgo's management team to manufacture glass for photovoltaic panels - so-called 'solar glass'. Rather than build an entirely new manufacturing plant, Ducatt plans to use Emgo's existing plant in Limburg in Belgium. Owing to its particular properties, sand from Limburg is already being used for the manufacture of solar glass. Ducatt will also take on 100 Emgo employees.

Solar glass accounts for about 1% of the €20bn a year global market for flat glass. However, solar glass is the only rapidly growing sector of flat glass production, with a growth rate of 15% in 2009 and even higher growth rates expected for the next few years. With the EU representing just under 80% of the global market for photovoltaic modules, Ducatt will be geographically very well placed to cater to this emerging market.

Capricorn and LRM each contributed €10mn to the €20mn total which is very large for a Series A investment. The mean investment size for Series A cleantech investments in 2010 was only about €4mn. This investment also bucks the trend towards later stage investments we have seen recently.

In practice, however, the fact that Ducatt intends to retool an existing plant rather than build from scratch, effectively reduces the investment risk to that of a late stage investment. Indeed, any additional financing requirements for the project are to be met by bank debt.

Belgian venture investor Capricorn is a pan-European manager of venture capital funds targeting technology. This investment was made from Capricorn's €112mn Capricorn Cleantech Fund. Capricorn last featured in our April 2010 Bulletin with a €24mn late stage investment in Punch Powertrain - a manufacturer of transmission systems for hybrid cars. As an early leader in cleantech, Capricorn has had a dozen cleantech and hardware investments totalling over €140mn feature in our Headline Transaction Index (HTI) since 2007. Some of Capricorn's best known portfolio companies are Norwegian eco-vehicle company Think and silicon recycler Metallkraft.

Belgian regional development fund LRM is not sector specific and will invest at any stage. It is slightly unusual as a regional development fund in that it is able to offer not just venture funding but also project finance and real estate through its industrial and business parks.

Company	Sector	Round	€mn	Description	Investors
Cambridge Broadband (UK) www.cbnl.com	Hardware	Late Stage	12.5	Provider of carrier-class point-to-multipoint microwave transmission equipment.	Accel Partners, Adara Venture Partners, Amadeus Capital Partners, Samsung Ventures Europe, TVM Capital

Cambridge Broadband Networks (**UK**), a provider of point-to-multipoint (PMP) microwave transmission equipment, raised **$16.5mn** (**€12.5mn)** in a **Late Stage** round from new investor **Samsung Ventures Europe**, with participation from existing investors **Accel**, **Adara Venture Partners**, **Amadeus Capital** and **TVM Capital**. The money will be used for growth.

Back in 2000 when the company was founded, most people accessed the web over a phone line and used their mobile phones as - well - telephones. Even at that time, however, with the internet bubble bursting around them, founder and CEO Peter Wharton said in the company's first press release that:-

> *"Broadband will unleash unprecedented Internet and multimedia access for users - giving data transfer rates up to a thousand times faster than with a conventional phone line. You could enjoy a live two-way video phone call- or download an entire music CD in just minutes compared to the hours it takes today. Multi-channel video- real-time video-conferencing and graphic-rich Web browsing all rely on the exchange of huge amounts of data — any bottlenecks will slow down the entire process."*

A decade later, Wharton's words encapsulate the key issue for mobile carriers - data traffic from wireless "Internet and multimedia access" is growing much faster than voice traffic from new users. Moreover, data traffic is growing over ten times faster than data revenues. Wharton's data "bottlenecks" are the backhaul - the connection between the core network infrastructure and the mobile base stations which talk to smartphones and laptops. It doesn't matter how fat the network backbone is, if users can't connect to it they suffer. As operating expenses are driven by backhaul costs, this is a significant problem for operators.

Cambridge Broadband's VectaStar PMP backhaul technology is less expensive to deploy and operate than traditional point-to-point (PTP) backhaul which requires a spectrum license for each link and each link can only carry one type of traffic over one type of frequency. PMP brings a number of cell-sites back to a single hub, thus reducing capital as well as operating costs by up to 60%.

This latest round brings the total investment in Cambridge Broadband to over €80mn and is the first by Samsung Ventures Europe - a division of the Samsung Venture Investment Corporation (SVIC) now dedicated to Europe. Reported as having $400mn under management, SVIC has raised over a dozen funds ranging in size from €7mn to over €100mn since its inception in 1999. Samsung's investment is a precursor to a strategic relationship to create a new channel to market for Cambridge Broadband's VectaStar product.

With €75mn under management and 14 portfolio companies, Madrid-based Adara Venture Partners (AVP) primarily targets Spain and Portugal-based IT and cleantech ventures, as well as more established technology companies based elsewhere in Europe. AVP is one of the new breed of European VCs with local roots but international aspirations operating very much along the lines of Silicon Valley VCs (all partners have trained in the US and worked for US companies).

Munich-based technology and life sciences investor TVM Capital has previous experience in this sector through its investment in wireless infrastructure company Ubidyne (see our August 2009 issue). Over the past 20 years, TVM has raised €1.3bn and made over 150 investments.

Company	Sector	Round	€mn	Description	Investors
PE International (Germany) www.pe-international.com	Software	A	8.0	Provider of software and consulting services to assess product and corporate sustainability.	GIMV, Siemens Venture Capital

PE International (**Germany**), a provider of software and consulting services to assess product and corporate sustainability, raised **€8.0mn** in a **Series A** round from **GIMV** and **Siemens Venture Capital**. The money will be used to finance growth.

PE International is unusual in the field of sustainability in that it is over 20 years old, having started out helping companies assess the life cycles of their products. With 14 offices in Europe, South Africa and the Far East, the company has over 1,000 customers including blue chip clients such as Allianz, Bayer, Daimler, Deutsche Post, Kraft, Toyota and Volkswagen as well as current investor Siemens. PE also has a presence in the US through a joint venture with Five Winds International.

Interest in enterprise-level sustainability is gradually increasing. There is no single piece of legislation acting as a trigger for a 'big bang' in sustainability monitoring, but there is a creeping trend to introduce legislation to encourage environmental sustainability. Such legislation is fragmented and differs widely between jurisdictions. Examples include the various climate change bills passed in response to the Kyoto Protocol, the European Emissions Trading Scheme, China's Energy Conservation and Renewable Energy Laws and the UK's Climate Change Act which introduced the Carbon Reduction Commitment (CRC).

While the US lags well behind Europe and has failed to ratify the American Clean Energy and Security Act, in June 2009, NASDAQ OMX and CRD Analytics launched an index tracking corporate sustainability. This index is based on voluntarily disclosed data on a company's carbon footprint, energy usage, water consumption, hazardous and non-hazardous waste and CSR activities.

The fact that PE has been going since well before climate change and sustainability legislation started being introduced means that it is now well-placed to benefit from the consequences of such legislation. In particular, the company claims that its GaBi database of product life cycle data is the most comprehensive in the world. PE's life cycle assessment software (GaBi), corporate sustainability tracking and reporting software (SoFi) and its consulting capability allow it to provide services such as quantifying a product's carbon footprint, measuring a supply chain's sustainability or certifying the eco-credentials of buildings.

Siemens Venture Capital (SVC), the corporate venture arm of global electronics and engineering giant Siemens AG, has invested more than €800mn in over 150 companies and 40 venture capital funds. With €100mn under management, SVC is headquartered in Munich and has offices across China, India, Israel and the US. SVC used to be an active investor in early-stage companies but in the mid 2000s (ahead of the herd as it were) moved to late-stage investment and now focuses exclusively on growth-stage companies.

With ten investments appearing in the HTI this year, half-a-dozen of which have appeared in our bulletin, GIMV is well known to our readers.

Company	Sector	Round	€mn	Description	Investors
Abiquo (Spain) www.abiquo.com	Software	B	7.6	Provider of management software for cloud computing infrastructure.	**Balderton Capital**, Nauta Capital, Eurecan

Abiquo (**Spain**), a provider of open source management software for cloud computing infrastructure, raised **$10mn** (**€7.6mn**) in a **Series B** round led by **Balderton Capital** with **Nauta Capital** and **Eurecan** participating. The money will be used for sales and marketing.

Founded in 2006, Abiquo has developed software to manage and secure Cloud computing infrastructure. This enables organisations to outsource the provision of physical infrastructure to specialist third parties, while still retaining full control of the virtual machines which run on it. A beta release was tested by the open source community and a number of commercial organisations, including some Global 1000 companies, during the last three quarters of 2009. In February 2010, Abiquo raised €1.5mn from a Series A equity investment by Nauta Capital and formally released two versions of its product - an open source Community Edition and a paid-for Enterprise Edition for corporates. Revenues are generated both from support for the open source version and sales of the Enterprise Edition.

According to the company, one of its key USPs is what it calls 'hypervisor independence'. A hypervisor - also known as a Virtual Machine Monitor (VMM) - is software run by the hardware owner on each physical machine in the cloud and supervises each instance of a virtual machine that an external organisation might run on it. Until recently, most cloud management tools were only compatible with a small number of hypervisors. Abiquo claims to supports all major hypervisors and eliminate vendor lock-in.

Shortly after its Series A investment, Abiquo announced a new headquarters in California, a new office in London to go with the existing office in Barcelona and backing in excess of $5mn (roughly €4mn) thanks to extra funding from venture debt specialist Kreos Capital and support from the Spanish Ministry of Industry, Tourism and Trade (MITYC). This is a great example of capital efficient financing from such an early stage company.

The current round was led by new investor Balderton Capital. With $1.9bn under management and over a 100 investments to date, mostly in Europe, Balderton will be well known to our readers. Balderton have a successful track record with open source software having backed database company mySQL (sold for $1bn to Sun Microsystems in February 2008) and more recently Talend, a data management software specialist which most recently raised $34mn from Silver Lake Sumeru (see our November 2010 Bulletin).

Less well known is Nauta Capital which first featured in our bulletin in July 2010 with its investment in flirtomatic. Founded in 2004, Nauta has offices in Barcelona and Boston and primarily back Spanish companies with international ambitions. Its preferred investment size is €0.5-6mn in wireless businesses, software and e-commerce. It has €165mn under management in funds of three vintages and, including Abiquo, Appearing for the first time ever in the HTI, Eurecan is the venture arm of Spanish bank Caja Navarra, a regional retail bank. Eurecan has invested in 27 companies so far and provides not only equity investment but also various forms of venture debt, preferential loans and advisory services.

Company	Sector	Round	€mn	Description	Investors
Performance Horizon Group (UK) www.performancehorizon.com	Internet Services	A	5.9	A developer and provider of online performance marketing solutions.	DN Capital

Performance Horizon Group (**UK**), a provider of online marketing technology, raised **£5.0mn** (**€5.9mn**) in a **Series A** round from **DN Capital**. The money will be used for expansion as the company anticipates to double its headcount in the next twelve months.

Headquartered in the North-East of England, with a dozen employees and additional offices in London and Luton, the Performance Horizon Group (PHG) was set up in January 2010 by Malcolm Cowley and Paul Fellows. Serial entrepreneurs Cowley and Fellows founded the buy at affiliate network which was sold to AOL for $125mn in 2008 and are also investors in ShareMyPlaylists.com, a Spotify add-on.

PHG is developing a number of performance marketing solutions in the fields of e-mail marketing, affiliate marketing and other forms of lead generation. Performance marketing is the practice of paying for advertising by results rather than simply by activity. Rather than paying for advertising per page impression or in proportion to the amount of traffic a website has, or paying a fixed fee for search engine optimisation (SEO), instead the advertiser pays on the basis of results. The classic example is cost-per-click (CPC) or cost-per-action (CPA) advertising where the advertiser only pays if the user actually clicks on a link or makes a purchase.

The company currently has two products live:-

- Performance Mash - a platform which allows online retailers to carry out their own affiliate marketing campaigns, tracking and paying for traffic generated by affiliate web sites.
- Lead Box - a system to allow advertisers and advertising agencies to set up and manage their own lead generation networks. The system, which can be white-labelled, allows for the cleaning and 'de-duping' of multi-channel leads, campaign performance tracking and the payment of publishers.

With €98mn of assets under management DN Capital provides both early-stage and growth equity to digital media and software companies in Europe. With one of its two founding partners now based in the US, the firm is adept at helping US companies enter the European market and vice versa. DN's portfolio includes 14 current investments including e-tailers, digital media and consumer service companies, wireless services companies and enterprise software developers. The firm has made four exits so far, three of which (the sale of OLX to Naspers, the sale of Lagan to Kana and the sale of Kaidara to Servigistics) were in 2010 for undisclosed amounts. DN Capital is also well-known for its unwavering support of Shazham which picked up an investment from Kleiner Perkins in 2009 and has become one of the most successful mobile app with over 50 million customers in more than 150 countries.

Published on 24 January 2011 by Go4Venture Advisers LLP

48 Charles Street
Berkeley Square
London
W1J 5EN

+44 (0)20 7529 5400
vcbulletin@go4venture.com

Disclaimer

This report has been prepared and issued by Go4Venture Advisers LLP who are authorised and regulated by the Financial Services Authority.

All information used in the publication of this report, has been compiled from publicly available sources that are believed to be reliable, however no representation, warranty, or undertaking, express or limited is given as to the accuracy or completeness of the information or opinions contained in this report. Opinions contained in this report represent those of Go4Venture Advisers LLP at the time of publication. This research is non-objective. This document is provided for information purposes only and should not be construed as an offer or solicitation for investment. Furthermore, as the information contained in this document is strictly confidential it may not be reproduced or further distributed.

The value of investments and any income generated may go down as well as up. Past performance is not necessarily a guide to future performance. Investors may not get back the amount invested. This publication is not intended to be relied upon in making any specific investment or other decisions. Appropriate independent advice should be obtained before making any such decision.

This report has been compiled by Jean-Michel Deligny, Managing Director – for and on behalf of Go4Venture.