



Hey you, get onto my cloud

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Martin Steward talks to SRL Global about bringing cloud-computing hedge fund portfolio infrastructure to the pensions community

Talk to large financial institutions about hedge fund managers, and you might get the idea that they all run on seat-of-the-pants infrastructure riddled with 'operational risk'. And yet a significant part of the industry – in places like high-frequency trading and the better fund of funds – has been established by professionals who left big institutions because their ambitions hit operational brick walls.

"Hedge funds are one part of finance that has really got to grips with using technology to improve efficiency and costs," says Neil Puri, CEO of SRL Global. "Fewer than 100 hedge funds manage more than \$1bn (€730m), but they deploy a huge array of sophisticated tools. And yet pension schemes managing tens of billions of euros often do so with very little technology."

SRL Global (it stands for Statistical Research Laboratory) aims to bring hedge fund technology to any institution that delegates asset management. Its NEXUS Enterprise suite was developed in 2007 as a joint venture with Man Group to sit behind the Man Global Strategies (MGS) managed account platform, collecting, enhancing, storing and analysing multiple-source data to improve due diligence and asset allocation. But the impact of the financial crisis led to a restructuring at Man.

"This forced us into a decision" recalls Puri, "Should we continue as asset managers or take the opportunity to bring our technology out from behind the 1-and-10 fee structure?"

SRL went solo in July 2009, and a year later raised £7.5m from Augustum Capital and fund of hedge funds manager Revere Capital Advisors (which also uses NEXUS itself). There are now 30-plus engineers working in SRL's offices on the outskirts of London.

So what does NEXUS do? Puri enjoyed showing IPE how much insight and control the front end – NEXUS Analytics – gives investors into their portfolio. Its suite of performance attribution, risk analytics and investment audit functions takes you much deeper than trying to aggregate monthly NAVs and portfolio holdings details from several asset managers.

"How much exposure you have to BP, or peripheral Europe?" says Puri. "What is your DV01 [interest rate sensitivity]? With NEXUS you can see your gross and net exposure to BP at portfolio level, which funds hold it, and how your managers have traded it – in aggregate, and individually. That enables you to see style drift when it happens, how efficient trading is across your portfolio, and to distinguish changes in your exposure that come from trading activity and from market movement – which might make a difference to how much exposure you want to hedge at any particular moment."

In performance attribution you can calculate rolling betas and R-squareds against a range of benchmarks, or pick out any number of factors for risk decomposition exercises. In risk management, you can recreate scenarios on-the-fly, seeing immediately how they would affect your portfolio as it stands right now.

"We can set these up for you, generically, or you can create bespoke factors and scenarios," says Puri. "Maybe you want to recreate something like May 2010, but with some tweaks to the correlation matrix?"

Furthermore, these tools can be applied at every level and sub-grouping of your portfolio: to the scheme or fund as a whole; to the strategic, tactical or overlay portfolio; to the equity or bond or hedge fund manager portfolio or a mix of any of them; to an individual manager; to a sub-section of an individual manager's portfolio. As asset owners make more use of third-party advisers in general, and complex alternative strategies in particular, this kind of user-friendly interface with portfolio risks could become vital to maintaining fiduciary responsibility.

"Every pension scheme has its internal investment constraints," notes Puri. "How can you monitor compliance when asset management is farmed out to perhaps dozens of third parties?"

These issues are particularly acute for the pensions world, he says, now that global accounting standards have made sponsors more sensitive to schemes' shorter-term risk exposures. If that drives you towards an LDI strategy, you need to be able to benchmark all of your managers against the factors feeding into your liability risk. "How do we keep track of this, particularly when some managers will have long exposure, some short, some a combination?" asks Puri. "Look-through counts."

But while NEXUS Analytics looks impressive, what Puri argues really makes NEXUS stand out is all the graft it applies to your data before it gets to the front end. Indeed, as Puri points out, all of that work creates a dataset that is totally agnostic as to which provider's analytics tool gets plugged in, and it should bring the best out of those tools because they will be crunching complete, standardised data owned by you.

"Today you need to analyse your dataset – not your service providers' datasets," says Puri. "Otherwise you're driving blindfolded with someone in the back seat telling you which way to turn. And the data has always existed."

This is where NEXUS Data Depot comes in. It gathers data from all of your sources – administrators, prime brokers, asset managers, custodians, OTC counterparties – and then figures out what it all is. Sounds simple – except that there is no standard file format for that data or its quality or regularity. Files are standardised, extracted, quality checked, and assets are identified by an algorithm or, if that fails, by the NEXUS team. SRL's technology to sort out these problems is patent pending.

This data is then fed into NEXUS CARE (classification, aggregation, reconciliation and enrichment) to be reconciled and enriched for missing attributes, using each source of the data or, if that fails, external market sources.

“There is that problem of how you deal with incomplete or non-standardised information again,” says Puri. “Most solutions default to the lowest level of quality. NEXUS enables you to go to the highest level by creating a proxy for the holdings of your portfolio where the data is incomplete. You also benefit from storing all these statistics – if a certain piece of data is due in at 18:00, but recently it's been coming in at 20:00, you can see that through the front-end and interrogate these areas of potential risk.”

Finally, everything is aggregated into what Puri calls a complete 'cube': the data is now information that can be stored (in the warehouse of NEXUS EDM – enterprise data management) and analysed (using NEXUS Analytics).

The warehouse is a cloud-computing solution that sees SRL maintaining a secure, bespoke, multi-site data repository for each client. “We operate to the security standards of banks and exchanges,” says Puri. “We have two power grids, four power suppliers, 10 telecoms operators. We even have emergency diesel.”

Moreover, because “everything happens on the cloud” as Puri puts it, all the information and workflow is accessible to every user with a password key in real time – from the CIO, to his colleagues in risk management, to the consultant or fiduciary manager if you wish, as many as 500,000 users.

“You can have a live, interactive discussion around scenario testing, for example, and the entire process remains on the centralised database,” says Puri. “There's never the danger of losing spreadsheets when someone leaves your company, or file corruption, and you have a complete audit trail.”

Moreover, all the hard work NEXUS applies to your data remains exclusively yours to extract as a XML file. “Back-end services can hold asset managers hostage,” says Puri. “Once you're in, it's an absolute nightmare to get out. By contrast, you can fire us and take your data with you at the click of a button.”

That suggests a fair amount of confidence, and that is because the only competition SRL faces is from the most sophisticated in-house technology platforms created by asset managers. Administrators and prime brokers gather and generate data, custodians store it, risk analytics providers analyse it - none of them do all three.

“That was the hole that we saw from within asset management – nothing completed the cube to allow us to really interrogate our data,” Puri recalls. “We came to the market by accident. Had the events of 2008 not happened this would still be tucked behind a 1-and-10 fee structure, and I don't think it would emerge naturally from anywhere other than an asset management firm.”

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