Hedge Fund Technology 2013

Developments across the value chain

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Bloomberg has been well placed to develop such a solution. Bloomberg solutions include products such as EMSX, PORT (portfolio and risk analysis), MARS (Multi Asset Risk Solution), Bloomberg Tradebook, and AIM (Asset & Investment Manager), a blended OMS, EMS solution ideal for start-up hedge funds as it is able to support them from front through to back.

“AIM has a rich blend of execution tools with position management, pre-trade compliance engines etc, meaning we have a compelling total cost of ownership argument,” says Richard Pascoe, Bloomberg Trading Solutions – AIM.

“Historically our clients have been more focused on the front end, and order management, but where we’ve gained a great deal more credibility and gained market share in the hedge fund space,
is by building out the infrastructure to become a fully matured position portfolio management system.”

As clients start to harness the full capabilities of Bloomberg, the more they are looking to consolidate their data streams. “Since traders and decision makers favour the Bloomberg data, they would like all of their other systems to be fed by the same data. In other words they want to ensure that the numbers used in the back office are the same as those in the front office,” says Ulf Svensson, Enterprise Products & Solutions – Strategy & Business Development, Bloomberg LP.

“A lot of the work we’ve been doing lately is to help clients in providing that data. It could be end-of-day data, reference data, security master data, all the way to real-time streaming data.”

The key feature of platform integration is that hedge funds can pick and choose which solutions they want to add, or subtract, from the infrastructure as they evolve.

“It’s a plug and play approach, and that’s a key advantage. It avoids clients having to spend millions of dollars buying best-of-breath models,” adds Svensson.

Citadel Technology is a technology services company and part of the Citadel family. Having an umbilical cord to one of the world’s most technologically innovative multi-strategy hedge funds (Ken Griffin’s Citadel fund) means it is well placed to respond to the demands of the hedge fund industry.

One key drive has been the creation of a truly integrated OMS, EMS solution – referred to as ERAM OEMS – to provide seamless order, execution and trade management across listed, OTC cash and derivative asset classes.

“Our view is that OEMS represents the future,” says Pranat Pathak, Global Head of Client Relationship Management for Citadel Technology. “Our solution combines the best-of-breath features of standalone OMS and EMS systems. You need to provide a solution that is truly multi-asset in nature; one that allows a portfolio manager to seamlessly convert their investment thesis into an order.”

A report published last month by Greenwich Associates estimates that annual buy-side spending on OMS and EMS has increased 10 per cent over the past two years. This is largely in response to growing investor demands and tougher regulation and compliance.

Citadel Technology understands this. Its OEMS solution aims to help managers overcome these cost pressures, and at the same time provide the sophistication necessary to operate in an increasingly complex environment.

“We need to think in terms of technology that truly offers support to complex Investment Management Agreements, complex compliance processes. How do we integrate with a risk engine to enable user-defined pre-trade risk checks before an order is sent to the market? How do we allow users to look at different slices of data that pertain to their unique workflows rather than simply providing a black box solution that forces users to modify their workflows?”

Managers not only want an integrated solution where a trader can automatically send an order from the portfolio management solution to the OMS. They also want to ensure that IMA and compliance checks are performed before those orders get routed for execution. In effect, a real-time automated process.

“Some vendors might be state-of-the-art when it comes to the back office but then try to vertically integrate their solutions via acquisitions into the front office and offer a solution, which is not necessarily their core competence. From my perspective, that kind of solution does not work unless the vendor is truly skilled front-to-back.

“Our OEMS solution integrates with other components of the overall platform in a plug and play mode and helps managers work in a more automated manner. This helps to diminish operational risk, which is more pronounced when using disparate systems,” states Pathak.
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Front-to-back solutions: myth or reality?

Interview with Ulf Svensson

To paint a picture of the hedge fund space today is to show a world of tightening margins, an industry where fee-structures have shifted away from the historic 2 and 20 compensation structures and a business model restrained by regulatory changes. At the same time, as margins tighten, the modern investor continues to have a high expectation of operational and cost efficiencies, pushing fund managers to do more with less. Managers are adapting quickly and aspiring to create systematic efficiencies by lowering operational costs. Depending on the fund’s size, strategies may vary, but the desire for highly-flexible, scalable solutions, fed by reliable data, remains a constant.

"Managers want more standardised, integrated solutions and that standardisation trend is well underway," says Ulf Svensson, head of strategy and business development for Bloomberg LP’s Enterprise Solutions group. "The ability to harness the power of an integrated platform, fed by high-quality data, is a powerful proposition when courting potential investors. After all, operational robustness is becoming just as important as the investment strategy itself when managers deliver their pitch."

However, it’s not always advisable to take a binary approach to revamping legacy IT infrastructure. Instead it’s better to take a phased approach. Svensson notes, "At Bloomberg, we like to think of it as a journey. As clients’ demands change, we can provide cost-efficient and feasible solutions that help mitigate risk exposure."

Service offering

While funds have different levels of services depending on their maturity, there are some common building blocks that funds of every level need. Bloomberg offers a suite of hosted and managed services.

“In addition to Bloomberg’s popular desktop software, the Bloomberg Professional service, we have three cornerstones, or categories, of products and for hedge funds: market data, meaning reference and real-time data; managed infrastructure services and applications for order management, trade execution, portfolio and risk management,” says Svensson. Bloomberg occupies a unique position for the buy-side by virtue of its well-established presence; almost every investment management firm already uses Bloomberg information and has a commercial relationship with Bloomberg.

The use of Bloomberg’s desktop software in many institutional financial firms helps its credibility with hedge funds. Since 1982, Bloomberg LP has been a leading market data provider to the financial services industry. Bloomberg’s track record as a dependable source of comprehensive data is reinforced by the Bloomberg’s systems transparency and market-leading analytics. Reference and fundamental data is sourced back to the researcher or person responsible for collecting it. This system promotes accountability and transparency, which ultimately makes data dependable. The rigour Bloomberg puts into data quality is one of the reasons it is viewed as a leader in providing data accuracy, reliability, uniformity and speed. These same virtues now have the potential to transcend the entirety of the work flow as opposed to only the front-office suite.

Front-to-back offering

Historically, hedge funds managers have familiarity with Bloomberg’s desktop system, analytics and execution tools. As a trader in the front-office becomes more aligned with the middle and back-office, the need for data consistency throughout the hedge fund organisation is driving demand for consolidated data streams.

Bloomberg has gained a great deal of
credibility and added market share in the hedge fund space by building out its infrastructure. It has become a fully matured position portfolio management system, an evaluated pricing provider, a consistent and quality data distribution channel, and a fully integrated compliance engine, all offered through a managed infrastructure model, spanning asset classes. Bloomberg delivers information about more than six million instruments spanning asset classes that include equities, commodities, mortgage-backed securities, derivatives, mutual funds, real estate, foreign exchange, and more. When clients come to Bloomberg, they are now looking at a full, front-to-back solution. The overarching aim is to make data more available to users through this range of end-to-end solutions that aim to work in harmony to provide managers with the level of integration that best meets their individual needs.

“Bloomberg is far more than a provider of news and data,” says Svensson. “Having these different building blocks in place allows us to deliver a highly-flexible, scalable platform offering that ensures every component is working together, and accessing the same high-quality data.”

**Emerging and established funds**

For the established fund manager, efficiencies of scale require the ability to adapt pre-existing solutions with new demands. These funds must migrate from their legacy infrastructure to appeal to their existing and desired investor base.

“For such funds, the name of the game is to move away from the jigsaw puzzle infrastructure approach based on multiple systems and multiple data sets,” says Svensson. “Increasingly, fund managers and decision makers who were using alternative data feeds for their back and middle office teams are now looking for a solution that is fed by a consistent data set.”

Where established managers are concerned by the synthesis of legacy systems, emerging managers are pressured by the need to implement flexible front-to-back solutions that will satisfy operational needs during both the growth stage, as well as the move into established funds.

In response, Bloomberg offers flexible solutions that can attract funds at every stage and integration phase.

For instance, Bloomberg’s Asset and Investment Manager (AIM) supports many business functions through the entire value chain, it is most established as a portfolio manager and order management system for the buy-side.

For the emerging fund manager that oversees a fund of USD250 million assets under management (AuM) or less, Bloomberg offers the ‘hedge fund in a box’ technology solution known as HBOX. HBOX is a turnkey solution that combines sophisticated business management tools such as an order management, profit and loss calculations, execution management, compliance and straight through processing (STP) all integrated with Bloomberg data. As a fund grows, the HBOX solution enables fund managers to transition to using the full AIM offering. Bloomberg understands the upfront operational risk that emerging funds hesitate to take on, and has responded by developing scalable solutions which accommodate the need for flexibility.

Equally, for established funds, implementing a Bloomberg solution does not necessitate migrating away from their existing infrastructure. Many managers have invested in a proprietary solution or bought technology solutions off the shelf. Bloomberg has established relationships with more than 100 third-party technology providers to facilitate system and data integration on behalf of a client. This ensures that managers do not have to replace existing systems. Using consistent data from the desktop to financial models, trading systems, compliance and reporting applications enhances portfolio management and improves risk and compliance practices.

The overarching objective is to make data more available to users. Bloomberg data nourishes Bloomberg’s systems as well as proprietary and pre-existing systems, spanning across all asset classes. Bloomberg’s goal is to provide managers with the level of integration that best meets their individual needs. Bloomberg understands that in today’s heightened regulator environment where there is increased investor scrutiny of hedge fund investments, fund managers are being prompted to review the underlying assets in a firm’s investment portfolio. That, in turn, multiplies the amount of information that needs to be shared and processed before confident decisions can be made.

For example, Bloomberg’s evaluated pricing service, also known as BVAL, combines unique market insight and quantitative models with data from thousands of contributing sources to produce credible, transparent and defensible valuations for OTC securities and derivatives. Bloomberg data undergoes a rigorous verification process so hedge funds can evaluate pricing for traditional assets and derivatives, as well as enhance compliance reporting and risk analytics.

**Bloomberg value proposal**

Svensson adds, “Hedge funds are different from other buy-side groups because they have, depending on their strategy, a bit more flexibility. This creates the need for flexible infrastructure and system support. At Bloomberg, we are pleased that the market no longer sees us as a desktop-only vendor, but rather a partner for evaluation, compliance and infrastructure support. We will continue to evolve with the trends and demands of the markets and we continue to value the trust our clients place in us to deliver innovative and scalable solutions that meet their needs.”
Another growing technology trend is the use of cloud-based platforms. One of the leading providers is Eze Castle Integration, whose Eze Private Cloud has enjoyed significant uptake in recent times: currently growth is 40 per cent per annum.

According to Bob Guilbert, Managing Director at Eze Castle Integration, the two main concerns that hedge fund managers have before deciding to use the cloud are: 1) How secure is my data, and would it ever be commingled with another fund on the platform? 2) How does the cloud work with respect to regulatory/compliance requirements?

Guilbert comments: “With respect to security, there is no chance that any data would ever be commingled. Every client’s data and applications are isolated on the cloud and virtualised at multiple levels. With respect to regulation/compliance, we’ve worked with a variety of third parties to build solutions. One such solution is “Eze Archive”, which we’ve developed with our partners at Global Relay.”

Security has recently been the source of innovation for the Eze Private Cloud with Guilbert confirming that ECI has partnered up with a Canadian firm called eSentire, which proactively monitors the cloud infrastructure for security threats targeted at alternative fund managers.

“To guard against cyber attacks, eSentire has developed a solution called AMP - Asset Manager Protect. If a fund is being attacked or someone is trying to gain access, they will apply the remedy not only to that client, but to all clients using the eSentire AMP service.”

Should there be an attack, the eSentire Security Operations Service (eSOC) identifies IP address hosts that are confirmed sources of malicious activities, and submits these IP address hosts to the eSentire AMP blacklist.

In addition to security innovations such as AMP, Eze Castle Integration is also looking at ways to enhance the performance attributes for hedge funds that choose to run applications on the private cloud.

One such solution is solid state drive (SSD) technology, the benefits of which are two-fold.

“Firstly, they have no spinning media so it reduces the risk of physical breakage,” says Guilbert. “But the key advantage is that the IO can traverse through the drive much faster than a traditional hard drive. For managers who are using our cloud, and maybe working with large volumes of historical data to run sophisticated models and algorithms, higher performance is a compelling benefit, and a competitive advantage.

“We are looking very closely at incorporating this SSD technology into the private cloud.”

Mobile technology is pushing firms like Maples Fund Services and SunGard to update their user interfaces. This is to ensure that their solutions – be they middle office reporting solutions, front-end portfolio management solutions (e.g. SunGard’s Front Arena) – can extend across different platforms.

“Many of our client-facing applications were originally developed in Microsoft Silverlight. However, in order to be on top of the next wave of developments, including compatibility with all mobile devices, we are currently re-writing all of our user interfaces in HTML5,” confirms Tyler Kim, Chief Information Officer at Maples Fund Services.

This same technology is also being utilised by SunGard. Last year, the firm launched Hedge360, an integrated cloud-based platform that supports, in real-time, a series of SunGard modules including Front Arena, APT (a risk analytics solution), and VPM (fund accounting and reporting).

“Right now we are adding two areas: we are powered by IntelliMatch Operational Control, which is a reconciliation engine and a collateral management system, Apex, to Hedge360,” says Dae Kim, Director of Hedge360 at SunGard, who confirms that, given the enormous reporting burden being placed on managers, the firm’s recent focus has been to build a solution for Hedge360

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Tyler Kim, Maples Fund Services
that provides consolidated reporting and dashboarding: the result is the Hedge360 Web Portal.

“The technology has been designed to accommodate mobile users as well as browser-based users. The portal has been built using HTML5. The end user will be able to open up the portal within an iPad for example, and see various data visualisations, heat maps, bar charts etc, on the portfolio.

“We've worked with CIOs and marketeers to ensure that this web portal can become a key part of their marketing tools when presenting to prospective investors. In addition, clients will be able to add their own logos to reports, customise menus, so that the web portal becomes an extension of the firm,” explains Kim.

By sitting above the different modules that make up Hedge360, the web portal solution is able to take all of the data running front through back, in a hedge fund firm, and neatly summarise it. This is a big advantage to CIOs and CEOs who need to make quick, strategic decisions, and reinforces the integration theme that is now becoming so important to the industry.

More importantly, it means that managers will be better able to handle different reporting requirements ranging from OPERA to Form PF and the AIFM Directive, not to mention investor reporting, which is becoming evermore customised.

“We are beta testing the web portal right now. We aim to officially roll it out to the market later this year,” confirms Kim.

Maples Fund Services’ Tyler Kim believes that with the onset of greater transparency and accurate reporting, it will become even more vital to provide a first-class data management function. With so much data coming in, and multiple reporting requirements, hedge fund managers need all the help they can get.

“You need people with deep industry experience who know what they are looking at. You need strong data professionals who can process things at scale, which we have in our Hong Kong office. And at the same time have a high calibre of analytical skill to look at that data, spot anything that doesn’t look right, and resolve issues before things go live, which is what our team in Montreal does. It’s vital to standardise and normalise the data set,” says Kim.

“In addition, you need a good development team that knows all of the different modes of data integration and ways to present it through web-based portals, static reports etc.

“We are able to do this on a timely basis because our data management team work closely with the IT team and knows how best to leverage technology.”

Institutions are becoming more hedge fund-like and starting to hire their own internal hedge fund teams. As a result, Kim believes that the middle office reporting expertise that Maples FS currently provides to its hedge fund clients will, over the coming years, be increasingly adopted by pension funds as the nature of their portfolios becomes more complex.

“I think the next big technology trend will be all about big data; that is, the ability for managers and institutions, to absorb and distil information and present it in a meaningful way. The big data warehousing trend that started in the ‘90s is coming back with the explosion of data that managers are now having to work with and manage.”

For Citadel’s Pathak, integration and the ability to make fund managers lives as easy as possible will be the main development. There will, he says, be a focus on automating manual processes to reduce errors and associated costs: “We spoke to a fund manager recently, who told us that he rates systems based on the number of mouse clicks that he needs to make to go from portfolio construction to order management to order execution.

“Fund managers need to focus on investment management, but they also need technology to help them implement their own regulatory and compliance checks in order to demonstrate to investors that they have all the necessary checks and processes in place. More and more we are going to see solutions that facilitate client workflows.”
Misys Sophis VALUE is a fully integrated and modular portfolio and risk management solution for the buy-side. It provides complete cross-asset coverage from equities and fixed income to all forms of derivatives.

- Enables hedge funds to efficiently manage portfolios, performance analysis, compliance and investment operations across all geographies and asset classes
- Fully integrated holistic risk management capabilities allow firms to measure portfolio risk, carry out stress tests and perform VaR and liquidity risk calculations in real time

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Credit risk controls become paramount

Interview with Laurent Villiers

The issue of credit risk under OTC clearing is putting pressure on technology providers to develop cutting edge solutions.

Misys has long been aware of this and has moved quickly to enhance the capabilities within its integrated platform offering, Sophis VALUE, to support not only its buy-side, but sell-side clients.

As a result of the synergies that Misys has across its capital markets solutions such as Summit FT, Kondor+ and Sophis, its product management teams are able to work collaboratively to design and build products that cater to both buy-side and sell-side firms in response to current market challenges.

One risk-dedicated module that has resulted from this collaborative initiative is MGR Credit Risk, which helps banks and buy-side fund managers to calculate their credit risk exposures.

It includes a Limit Rules Engine that can structure almost any type of limit, as well as a scenario analysis and stress-testing engine. This allows users to simulate trades, before they are executed, to monitor the potential impact. Given that OTC clearing will involve daily margin calls, this ability to control margin limits is set to become of paramount importance.

Consequently, a recent technology enhancement that Misys has made to its MGR solution within Sophis VALUE has been to build a tool for calculating initial margin calls.

“We know from speaking to clients that they want the ability to do this ex ante in the front office system. Because this initial margin risk calculation is integrated into Sophis VALUE, it helps managers to overcome the IT burden of having to deal with OTC clearing,” explains Laurent Villiers, Risk Product Manager at Misys.

“To calculate initial margin you need to have all relevant credit definitions in place. You also need to have accurate market data to evaluate your initial margin, which could be VaR-based or stress test-based depending on the CCP.

“We effectively manage the credit risk that you need to set against your counterparties, making for more efficient workflows.”

Eleonore De Vial, a regulatory expert at Misys, adds that managers also want help understanding which trades will be clearable or not, based on CCP house rules.

“Within Sophis VALUE we aim to have the flexibility to define the rules of any particular CCP, so that when a client books a trade, depending on the nature of that trade they would have a list of eligible CCPs and clearing members to choose from. In terms of the initial margin calculation, we are currently working closely with CME and their core products to build an interface to help calculate initial margin for those products.”

As more CCPs come on board, the more effective the solution will become at supporting clients’ pre-trade margining calculations; the point being that managers will want to control their credit risk by optimising their margining requirements.

And that also extends to the number of counterparties they deal with. As Villiers goes on to explain:

“The next step is to give clients the ability to select from the best choice of counterparties. Not all hedge fund managers will want to deal with eight, 10 different counterparties, they will want to limit that number.”

“The goal will be to help clients see which prime brokers they should best be dealing with from an initial margining cost perspective,” adds De Vial.
On Monday 10 June 2013, phase two of OTC clearing for interest rate swaps and credit default swaps began under the Dodd-Frank Act. For the buy-side community, collateral management is set to become a more complex, far-reaching exercise involving higher volumes of collateral, increased margin calls, and more counterparties to deal with.

Market reforms will see clearing houses become the de facto central counterparty (CCP), into which both managers and their clearing brokers will have to post margin. Quite what the final number of CCPs operating in this new market structure will be is unknown. What is known, at least currently, is that each CCP will implement its own eligible collateral rules and cost structure.

Global custodians are only too aware of the challenges managers will face, and are fully focused on enhancing their technology capabilities in order to make collateral management as straightforward for managers as possible in this new multilateral counterparty environment.

One of the first custodians to recognise how regulation would potentially impact the markets is BNY Mellon. Back in 2009, when the Dodd-Frank Act was passed in the US, the firm started to move quickly to deploy new technology to support the buy-side. This was nothing new for the firm. It has had an established collateral management business for decades and with currently USD2trillion in assets under custody, it is one of the industry’s leading custodians.

“Our systems and processes have been in place a long time and they have been refreshed and repurposed, if you will, to support the buy-side community as they
start their journey into the clearing space,” explains Nadine Chakar, Executive Vice President and head of product development and strategy for BNY Mellon’s Global Collateral Services business.

“We have therefore been supporting cleared trades for a number of years now and it’s nothing new for us. But what we’ve had to do is make enhancements, where possible, to automate things a little more for hedge fund managers. Our automation previously focused on the trade capture process and reconciliation for bilateral arrangements. Under OTC clearing, there are more players involved so reconciliation has become a lot more eclectic, you’ve got to do it daily.”

The aim has been to deploy a new generation of systems that are fully geared to support the needs of buy-side clients in both the cleared and non-cleared world (which will still exist for certain OTC derivative contracts but will require higher initial margining) and provide as much integration as possible.

As Chakar explains: “What we’ve done with our technology is link it all together so that any time a client books a trade they know exactly what collateral they have, they know exactly what is the cheapest collateral to deliver, they know exactly what is the intrinsic value of that collateral – do they want to put it out for loan or use it for collateral management purposes? – and which CCP is the most efficient to trade with.

“We’ve been on this journey now since 2008, and in the past 18 months we have been really focused on enhancing the experience for buy-side clients, giving them as much connectivity as possible.”

Kyla Lapierre is a Senior Vice President within Global Operations at State Street. At the beginning of 2013, Lapierre says that a strategy group was established to focus not only on State Street’s collateral management offering, but also processing and how best to consolidate its operations and technology around the world.

“We are looking to consolidate our locations as well as transform the way collateral management is being performed. At the current time we have a variety of applications being used around the globe and we are looking to consolidate them into one or two primary systems that will support our clients.

“Our systems and processes have been in place a long time and they have been refreshed and repurposed, if you will, to support the buy-side community as they start their journey into the clearing space.”

Nadine Chakar, BNY Mellon

“The first one is called the Collateral Management Workstation, an in-house built platform. This will be the primary system that we use. In addition, we currently have an RFP on the Street for collateral optimisation,” confirms Lapierre.

Continuing the integration theme referred to above, Lapierre adds: “We have an end-to-end product offering from execution, servicing, clearing, collateral management, valuation and risk analytics. All of those components sit in that end-to-end offering, which we are presenting to our clients.”

When ready, the optimisation tool will simply integrate into Collateral Management Workstation with Lapierre confirming that the aim is to get this tool ready by Q4 2013.

At BNY Mellon, the collateral management framework is based on SOLVE: Segregation, Optimisation, Liquidity, Value, Efficiency.

“We’ve created the SOLVE framework to help our clients deal with the full range of clearing issues. At the end of the day, our scope is to help clients move their collateral anywhere in the world, any time, and to help them do that as effectively and cost-efficiently as possible,” explains Chakar.

There are several key concerns that hedge fund managers have with respect to moving into an OTC clearing environment: initial margin optimisation and collateral segregation being two important ones.

With respect to initial margining, Misys has upgraded its front-to-back platform, Misys Sophis VALUE, so as to enable managers to calculate their initial margining at the pre-trade level. They want to know exactly how much certain trades will cost, and, crucially, what impact this will have on their collateral.
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CONTACTS

**Americas**
Kim Waldman  
+1 212 361 9513

**Europe**
Steve Lewis  
+44 20 7466 1633

**Asia Pacific**
Kate Colchester  
+852 3655 9000

**Middle East**
Fred Tabbal  
+971 4 511 4201

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Hedge fund technology becomes mainstream

Interview with Tyler Kim

Hedge funds are well known for developing advanced technology solutions that meet exacting standards and demanding requirements. Now, as their sophisticated investment strategies enter the mainstream, there is also a need for technology solutions to become more mainstream.

Two decades ago, when derivatives trading was still rare, hedge funds needed accounting systems that could help them understand their notional exposures, monitor leverage and liquidity, manage collateral and counterparty risks, and value complex instruments.

At the time, package software solutions that could address such needs were exceedingly rare. For many, manual workarounds evolved – such as using spreadsheets to track derivative positions offline, then booking a single journal entry for net unrealised gains/losses into a portfolio accounting system.

However, those fortunate enough to have in-house development capabilities began developing proprietary systems to address these needs. Industry-leading technology became a distinct source of competitive advantage for these pioneers.

Fast forward to today, and according to Tyler Kim, CIO at Maples Fund Services, the breadth of organisations requiring the level of technological sophistication previously needed only by hedge funds has expanded to include other players, such as traditional asset managers, institutional investors and private banks.

In Kim’s opinion, many financial institutions are becoming hedge fund-like in their investment strategies and operations, and hence can benefit from the technology and capabilities once reserved for this specialised niche.

“Hedge funds are like the asset management industry’s space programme,” says Kim. Amongst the benefits afforded by hedge fund technology is the enablement of new business models, leading to trends such as increased insourcing by institutional investors.

“Institutional investors are getting more actively involved in the investment process, in hopes of reducing costs and improving performance. However, they need the talent and technology to compete effectively with external managers they are seeking to displace. With access to tools that have been developed by and for hedge funds, such investors face less of a barrier to implement sophisticated investment strategies.”

This insourcing trend is not the exclusive domain of the biggest industry participants. Innovative mid-sized pension funds with access to the right technology have also found ways to increase their involvement in the implementation of sophisticated strategies.

“There are USD7 billion pension funds in the US, like San Bernardino County Employees’ Retirement Association, that have gotten very sophisticated – actively hedging their books, selling covered calls and buying put options to lock in equity gains, employing total return swaps, and co-investing with hedge funds,” confirms Kim.

Indeed, Kim says that a significant part of the firm’s growth over the past three years has been driven by pension funds “taking increased responsibility for investment decision making, and hiring us to provide the systems and operational infrastructure required to do so”.

And while the likes of Form PF is pushing hedge fund managers to present complex data in a distilled format that regulators can utilise, Kim notes: “Eventually, institutional investors that have insourced the execution of hedge fund-like investment strategies will need the ability to provide the same quality of reporting that external managers have been pushed to produce.”

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“Hedge funds are like the asset management industry’s space programme,” says Kim. Amongst the benefits afforded by
“We have already created an initial margin calculation tool and what we are currently working on is a solution to help clients optimise their initial margining and reduce costs by netting everything (which they can currently do with their broker/dealers),” says Laurent Villiers, Risk Product Manager at Misys.

The next step will be to give clients the ability to select from the best choice of counterparties - who is offering the best price, which CCP is best suited, from an eligible collateral perspective, for certain types of trades?

“The goal will be to help clients see which prime brokers they should best be dealing with from an initial margining cost perspective. At the moment, the rules that are used to calculate initial margin are set by the clearing houses so we will need to incorporate all of these different rules,” explains Eleonore De Vial, a regulatory expert at Misys.

Managers will want to ensure that the right collateral is being posted to the right CCP at the right price: if a trade can be collateralised with corporate bonds rather than government bonds or cash, it will help avoid having to use high quality collateral for lower quality trades. This is especially important for broker/dealers as they strengthen their capital ratios under Basel 3.

“From our perspective, a lot of our tools around optimisation are designed to work after the manager has posted the trade - once we see the trade, we need to optimise it and make sure that our hedge fund clients are managing their liquidity as efficiently as possible,” comments Chakar.

“Can we catch the data early enough in the cycle to help managers figure out where they should settle that trade? That’s yet to be determined. A manager could have margin calls several times a day, so they are going to want an environment that is responsive and accurate.

“We are working on tools to be able to pull any type of collateral anywhere in the world into one integrated view for the client. But it’s not just about technology, it’s about having the intellectual capital - technology is the enabler that brings that intellectual capital to light and makes it useful for our clients.”

David Beatrix, senior business developer

“Our algorithm selects the most efficient collateral that needs to be posted to clearing firms and makes sure that collateral management does not disrupt the portfolio management activity”.

David Beatrix, BNP Paribas Securities Services

for OTC derivatives at BNP Paribas Securities Services, confirms that under the bank’s Collateral Access solution they will handle the collateral calls from managers’ clearing firms and make sure that “collateral management does not disrupt the portfolio management activity”.

“Part of the collateral management solution under Collateral Access is Smart Allocation, and the use of an algorithm to help clients deal with different eligibility rules used by clearing houses and counterparties.

“Our algorithm selects the most efficient collateral that needs to be posted to clearing firms at any given time, taking into account various parameters, and manages automatic substitutions when required,” says Beatrix.

With respect to the other key concern, collateral segregation, Chakar notes that BNY Mellon is starting to see increased demand from both buy-side managers and, increasingly, the broker/dealers themselves.

“Large global fund managers are really trying to figure out how to segregate collateral. They’d rather make sure that the collateral is housed with a strong well-capitalised institution than worry about whether their collateral is being trapped in the system (i.e. rehypothecated by their prime brokers).

“We are doing a lot of work to set up those segregation mechanisms all the way from LSOC (Legal Segregation with Operational Commingling) in the US through to the 14 or 15 different flavours of segregation in Europe when you look at Eurex, LCH etc, who have yet to settle on the final version of segregation.”
Lapierre says that collateral optimisation and transformation - whereby if a CCP isn’t willing to accept corporate bonds could the custodian change them, for example, into euros as eligible collateral? – are important issues, but agrees that segregation will be paramount.

“We have a segregated account model in play already for one large client. We also have real-time viewing capability into those funds that the client can use, so they can get a clear view on their collateral positions as well as receive settlement confirmation, which can either be sent from our platform, or via SWIFT messaging.

“We think segregation of assets is going to be a big concern for our clients and hopefully they will rely on us as an independent party going forward. We have a solid offering, not only from a technology perspective but from an end-to-end service model perspective as well,” says Lapierre.

One technology solution that BNP Paribas Securities Services has recently developed for Collateral Access is “Direct to CCP”, designed to help clients settle collateral more efficiently.

“This framework has been designed to help the end investor avoid settlement risk by settling directly with the CCP, without having to go through the clearing broker. The aim is to facilitate the process for all those involved (custodian, clearing member, manager and CCP). Furthermore, in this model, we can cope with full physical segregation, which is an important requirement for a number of our clients.

“There are so many moving parts involved that streamlining the process for our clients, in an automated fashion, will be vital. At BNP Paribas we believe the flexibility of collateral solutions has become a key driver when selecting a custodian. Efficient risk mitigation, collateral protection and velocity as well as collateral optimisation are all essential in addressing the requirements of clients today,” says Beatrix.

Villiers adds that Misys is also working to enhance the cash and treasury management function within Sophis VALUE. This is understandable. As mentioned, under OTC clearing, managers will face daily margin calls. Therefore, having an accurate intraday window on the cash position of their portfolio will be hugely important.

“We are working on this enhancement now. Ultimately, OTC clearing is transferring credit risk into cash risk. Every manager will want to avoid a situation where they find themselves with no eligible collateral left to meet their margin calls. The enhanced cash management solution will enable portfolio managers to determine what would happen to their cash positioning were there to be a major move in the market, under different scenarios.”

“As a result of regulatory reforms, posting collateral for OTC clearing will cost managers and create some initial drag on performance. That’s going to impact end-investors such as pension plans, so you need to give managers the tools to make informed investment management decisions. We’re making sure that we are at the cutting edge of everything from collateral optimisation to segregation,” concludes Chakar.