Technological innovations 2012

Workflow automation drives collaboration

Key themes for e-trading desks

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The advances being made in technology to support hedge fund managers are significant, not only because the way hedge funds operate is becoming more complex thanks to multi-prime relationships and the trading of new instruments, but also because of the intense pressure of regulation.

Technology vendors, managers, fund administrators and prime brokers are all facing huge workflow challenges that require greater integration and, ultimately, automation as the industry moves towards ubiquitously towards a real-time operational environment.

Advent Software has long been a pioneer in meeting the growing demands of the global financial industry. Its Advent Geneva accounting engine aggregates data in one place to give managers a real-time view of P&L, whilst Syncova handles liability accruals and Tamale is used as a research management tool. There are believed to be plans in the pipeline to build an interface that will improve the aggregation of data however Advent is not commenting on product specifics.

Whereas risk reporting, as recently as five years ago, commanded far less of a manager’s attention, this is simply no longer true. Bigger funds are having to ramp up their compliance teams and can afford to spend sizeable amounts strengthening their operational infrastructure. Sebastian Ceria, CEO of US-based Axioma, who specialise in providing portfolio construction
tools to the market, has noted increased manager interest in the area of risk both for “regulatory and performance reasons”.

“For medium to large hedge funds that already have PMS (Portfolio Management Systems) they’re thinking of upgrading their risk systems; that’s where we’re seeing demand. Our robust risk models are updated daily. In the context of high market volatility this makes a difference and that’s why they’ve been looking to us as a partner as they expand their risk models,” notes Ceria. This has become the industry norm with other firms also offering daily updated risk models.

Ceria says that Axioma’s recent major technology development involved packaging its risk model generation code into a piece of software that it now licenses. The product is called the ‘Risk Model Machine’ and enables managers to generate their own risk models. After first being launched last May, version two was released last December.

“It’s not just a risk model but the ability to customise it to your own specific business needs,” adds Ceria.

Rob Agne, Director of Global Product Management for ConvergEx’s Eze Castle software says that investors today want risk overlay and greater transparency: “Consequently, we’re developing our own risk tool to run what-if scenario analysis wherein an analyst or portfolio manager can take a particular event and work out what impact it would have on their portfolio. This will integrate seamlessly with the Eze OMS (Order Management System) and is scheduled for release in 2012.”

One clear challenge that technology vendors face is supporting fund administrators, who themselves are faced with having to provide valuation and reconciliation on multiple assets from multiple prime brokers. Trade flows have risen in volume and become more diverse. “We’ve seen a pretty fierce push from the managers to the administrators to give them an aggregated multi-prime platform that has the ability to do everything from front, middle to back. At the same time the administrators are pushing firms like ours to fill that technology void,” comments Sameer Shalaby, President of Paladyne Systems, who provide OMS and PMS solutions to hedge funds.

Agne agrees, adding: “We’re being pushed to provide additional data integrations so that administrators can produce timelier reporting. They’re being pushed, we’re being pushed: we’re all in the same boat.”

Axioma is responding to the rise in multi-asset trading by developing a range of multi-asset class risk models covering the likes of credit, commodities and real estate. Says Ceria: “We plan to release these new models towards the end of the year. There’s also going to be a risk application designed for the middle office that can be used by hedge funds or asset managers alike.”

Although European and Asian hedge funds have long used independent administrators, this hasn’t been the case in the US. The self-administration tide is changing, however, because institutions are demanding it. Rather than spending heavily building a full accounting function in-house, a lot of the bigger hedge funds are now outsourcing middle- and back-office functions to their administrator, scaling back their operations teams and saving costs, happy enough to do a shadow NAV rather than a full-blown one.

“It’s beneficial to simplify their infrastructure but it’s putting more pressure on administrators. Managers want a multi-prime broker platform offered by the administrator, complemented with technology services that provide them with desktop tools to help with everything from front- to middle-office: e.g. trade capture, real time P&L, risk analytics. That model is where we think the industry is moving,” says Shalaby.

Real-time integration and managers communicating trades to their service providers as they’re being entered illustrates the industry’s move towards workflow automation. Paladyne, Advent and SunGard’s systems all connect directly to sell side brokers to manage data seamlessly, which is essential when creating these platform solutions.
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Handling the multi-counterparty liability issue in a real-time framework

By Tom Zdon

One of the biggest challenges for the managers we’re focused on right now is the issue of dealing with multiple counterparties and its impact on performance, cost of carry and on providing transparency across asset classes. Traders hold multifarious securities often through financing provided by their prime brokers. In years gone by, this was straightforward enough as managers typically had sole broker relationships.

Post ’08, however, this is no longer the norm. Multiple prime broker and custody relationships mean that today’s hedge fund manager is dealing with numerous margin agreements, managing cash balances across the institution, and attempting to reduce counterparty risk while maintaining relationships.

In essence, they want a workbench of tools that allows them to manage those multiple relationships in an easier, more efficient way.

Prime brokerage models have also become more transparent and yet harder to replicate. This in turn has increased the amount of work that middle- and back-office teams need to get done. Many are working 14-hour days keeping their heads above water, looking strategically across a hedge fund’s relationships and trying to figure out how best to manage them for the benefit of the firm – in particular managing the margin accounts, usually through numerous excel sheets and in some cases using a best approximation model.

Add to this the slew of new regulatory requirements and you will see the cost of operations climbing at a time when profitability is itself more volatile.

Investors too are more focused on the stewardship of their assets and have become savvy in asking to see how a firm manages this aspect of the business – both from a risk standpoint such as avoiding unnecessary margin calls, but also in maximising return on capital.

Achieving operational alpha can be obtained by automating and streamlining workflows. What we at Advent found is that in those firms that cannot do that, there’s a fault line, a pressure point, between the front- and back-office teams. People in the front office look over at the accountants and think ‘that’s a cost centre, they don’t help me or give me what I need to do my trading and portfolio management’. At the same time, the back-office staff are trying to plug holes in gaps, thinking ‘those traders want a different view of their positions every 10 minutes and I can’t keep up’.

What we see in firms that have a cross-asset class system, integrated to their prime brokers with the ability to produce fully cost loaded P&L, is that analysis of data becomes simpler, allowing a firm to focus on maximising trading opportunities. Better workflow integration and getting a holistic view of the business is something all hedge fund managers are focused on – driven by multi-counterparty expansion, regulatory requirements, and investor demand.

Institutional investors are the prime source of hedge funds’ assets and are demanding ever more institutional-quality controls.

It’s not a case of just knowing how well stocks perform, but how much traders are using financing arrangements to make those trades and the impact this has on P&L, understanding the ultimate cost of carry.

Going forward, collaboration across all market players and managers leveraging the strength of their partners to provide a world-class system will be key.
Dae Kim, Director of Hedge360 at SunGard, stresses that managers need to have a consolidated portfolio system like Hedge360 to support their multi-prime relationships. “Internal technology requirements are getting higher because of these relationships, increased due diligence, reporting and the trading of more complex instruments. Our goal with Hedge360 was to design a completely integrated solution that would encompass multiple SunGard products that are tailored to specific business requirements and integrate them on a private cloud for our hedge fund clients. Hedge360 is essentially a delivery platform,” confirms Kim.

The key to this is making sure separate products integrate with each other. SunGard uses FrontArena for front-office real-time P&L and risk, whilst APT is an advanced risk analytic platform and VPM provides back-office accounting functionality. “We’ve integrated with Bloomberg to provide static security master data, real-time pricing and all the primary EMS and OMS platforms so we can consolidate data from prime brokers and fund administrators.”

As new funds aren’t encumbered with technology they’re typically launching with a couple of primes, a fund administrator, a simplified skeleton staff and outsourcing most of the technology functions to the administrator. If they then get some of the technology themselves it’s a bonus says Shalaby: “That’s the world we’re living in and we’re going to see more of this type of set-up in the future.”

Another benefit of improved workflow integration is that managers can pick and choose what applications to use. Platforms like Hedge360 can be used to optimum effect, each program is like a piece of lego. “Hedge360 is a framework in which you can plug and play any modules you want. A recent start-up chose the platform and implemented FrontArena, which they used for about seven months. A prospective institutional investor wanted the manager to run his own shadow accounting so we bolted on VPM to provide that additional functionality with all the trade and price information being fed into the manager’s system ” explains Kim. “They can then tell investors that they’re running a shadow book independently of their administrator.”

“Hedge360 is a framework in which you can plug and play any modules you want.”

Dae Kim, Director of Hedge360 at SunGard

The theme here is one of close partnership and collaboration between vendors and administrators. Indeed, Paladyne was recently selected by Butterfield Fulcrum and in Shalaby’s view if managers are going to push their service providers for an all-in-one solution then it makes sense to foster these partnerships rather than administrators going out and building their own technology system at great expense.

“Getting someone like Paladyne to team up with an administrator like Butterfield Fulcrum to build a platform from front- to back-office is the combination that managers are ideally looking for. We provide a front-end component that sits on top of Butterfield’s platform. As soon as you enter a trade it shows up on their system. It makes end-of-day reconciliation that much simpler, giving the administrator the ability to provide value-added services in the middle-office area,” says Shalaby.

That’s not to say that managers are suddenly going to stop spending on new technology. Quant shops will continue to invest in their black boxes and the secret sauce that managers are reliant upon but there’s likely going to be more of a balance in technology: spending on in-house proprietary technology versus outsourcing ‘commoditised’ functions to service providers.

Seemingly overnight, people have embraced mobile technology: the use of applications on iPads and other tablet devices has given rise to a growing adoption among fund managers of cloud-based systems. It’s fundamentally changing the way people work.

Advent Geneva was recently chosen by high-profile start-up Carrhae Capital to maximise its efficiency and transparency and whilst iPad applications already exist for Tamale, Tom Zdon, Vice President of Business Development & Solutions at Advent confirms that Geneva’s mobile capability is still being tested: “When we build the mobile...”
device application for Geneva it will be able to take data not only from us, but also the manager’s prime broker(s) and administrator and consolidate it. We'll be launching a whole set of web-based and mobility-based tools that are workbench related at the end of the year and we'll be showing prototypes at our conference in May.”

Etonbridge is a London-based hedge fund technology consultancy. Its founder Campbell Thompson previously worked as a CTO for a number of years at Citadel Investment Group and other hedge funds. Marketing Director Tristan Last also worked as a technical consultant for Polygon Investment Partners, meaning both have clear insights into the unique technology pressures facing today’s managers.

“We talk their (CTO/COO) language and understand what risks they’re prepared to take,” says Thompson. “A lot of integrators and service providers want to make margin on the services they provide – we provide a kind of sanity check to make sure that what these companies say they’re going to provide is the right technology at the right cost.” Thompson notes that the firm is seeing growing interest in security management. Three years ago, a firewall was deemed acceptable. But with the recent proliferation of social media services like LinkedIn and the use of tablet devices and iPhones, CTOs are looking at integrating these things into their work environment, yet they're conscious of the security risks.

“There’s more interest in penetration testing, whereas managers two years ago wouldn’t have entertained doing that. Also, people want to go to a more granular level with things like web security gateways, which look to a greater depth at data going in and out. Managers want to ensure they’re not losing things like proprietary code,” asserts Thompson.

Going forward, Thompson thinks the firm’s advisory role on the use of cloud-based solutions will accelerate, given that it’s still relatively new technology. The attraction of cloud environments is the lower total cost of ownership. The danger for managers is they may potentially be pushed into an environment that doesn’t necessarily fit given that service providers have a vested interest in getting a return on their investment.

“We provide a kind of sanity check to make sure that what companies say they’re going to provide is the right technology at the right cost.”

Campbell Thompson, Etonbridge

Says Thompson: “Cloud is the right way to go but it’s still embryonic technology that needs to mature so my view is that fund managers should look at what they have, work out what fits in the cloud and what doesn’t and go for a hybrid solution. I think we’re still 18 to 24 months away from an environment where managers will feel comfortable using cloud-based systems.”

Last agrees, adding: “There’s not a one-size-fits-all for cloud. We’re helping clients decide what services work on the cloud, and what don’t, and what will in the future. And with some clients we’ve simply said ‘the cloud isn’t suitable for your infrastructure yet’.

One of the issues with cloud, presently, is connectivity. For high-frequency traders and quant funds executing trades in the cloud is pointless because of the inherent latency. “There’s room in the market for someone to put infrastructure into the likes of Equinix data centres where they provide a co-location service, or to work with companies like Fixnetix to deliver ultra-low latency connections: I don’t know of anybody out there currently doing that properly for cloud-based services,” says Last.

Advent Syncova is offered to smaller hedge funds as a cloud-based solution, as is Hedge360. Says Kim: “Because technology has come so far and because of our hosting capabilities, SaaS implementation really works well, especially for small- to mid-sized managers.”

Managers today are looking for alpha opportunities in ever-more exotic markets, putting pressure on their brokers to provide access. Agne concludes with the following observation: “The more markets that managers operate in, the more it creates a data management challenge – and with that comes a connectivity challenge. There’s an increasing need for real-time interfacing and the whole collapsing of front- middle- and back-office solutions offered by vendors.”
Over the last three or four years the technology platform between fund administrators and managers has become all-encompassing in terms of supporting front- through back-office operations. There’s a clear push towards real-time integration of services between managers and their administrators, brokers and custodians, and whilst technology vendors are clearly meeting this challenge there’s still plenty of room for improvement.

One of the obvious consequences of managers paring back their technology infrastructure is that fund administrators are being pushed harder than ever to give them the support they demand. This in turn is because managers themselves are coming under heavy pressure both from the regulators and investors to sharpen their game, become more transparent, and present data in a fast and meaningful manner.

Last May, fund administrator Custom House Group launched what it called phase two of Chariot, the firm’s web-reporting platform. Clients log on and Custom House downloads all the information it wants to publish into Chariot for investors and managers to access. Regardless of whether an investor is allocating to one fund or five, they can see the latest information on each of the funds, be it the NAV, fund
transactions, the offering document or any reports the manager has put out. That way, each investor gets to see only information that’s relevant to them. The system has recently been updated with the addition of a trading platform.

As Dermot Butler, chairman of Custom House Group explains: “Once we’ve done our AML checks and qualified an investor he can come in and place orders or redeem shares in a fund on the web. A lot of people say it’s risky. Frankly, I think it reduces risk because the main risk with subscriptions/redeemments is getting something wrong with your numbers – such as processing an order for 1,050 shares as 1510 shares for example. If the order is placed on Chariot, it will be processed as entered so it removes human error. Of course the original entry might be wrong, but at least we can then identify the error-maker without dispute.”

Last October, Butterfield Fulcrum decided to bolster its client-facing capability. It chose New York technology provider Paladyne Systems after careful consideration of the competition, principally for the strength of its front end and the fact that it is well integrated with Advent Geneva. Chris Mulhern, President and COO at Butterfield Fulcrum, explains: “What we got with Paladyne was an ability to deliver a full front to back solution with a strong order management system that executes trades to the street, and a dynamic client-facing portfolio management system. What made the extension of our product offering even easier was the fact that we had a relationship with Paladyne going back to 2009 and their products are already deeply integrated with Advent Geneva, our general ledger system.”

Previously, Butterfield Fulcrum had focused on back-office services like NAV calculation. By partnering up and using Paladyne ClientLinkTM the firm is now able to leverage Paladyne’s trading, portfolio master, real-time P&L, risk reporting and automated reconciliation tools to give its clients a more holistic front to back level of support. And Mulhern is already seeing the benefits: “We’re being invited more to pitch for more business and our closure rate for new business has gone up dramatically.

“Portfolio Master is already well integrated to the street. The technology communicates directly with the brokers, from order generation and communication to inbound fills of the trade coming back into the system. The application also has the additional functionality of locating short stock availability, pre- and post-trade compliance and great allocation capabilities,” explains Mulhern.

This is the kind of integrated support that managers are now looking for. Everyone sees the same trade flow and talks the same language. It’s a sign of deepening collaboration between service providers and managers. But things aren’t perfect.

Norman Hartmann is head of trading at Hamburg-based Aquila Capital. The firm runs a number of UCITS-compliant hedge funds and Hartman says that the main challenge remains streamlining front- to back-office processes. One of the most efficient ways of sending trade orders to brokers and getting confirmations back as quickly as possible is to use FIXML. “Your administrator also needs to be able to receive these confirmations from the fund manager, and also the brokers: that way their compliance systems are always up-to-date in real time.

“Nowadays, though, this is still not the case. There are many different environments. We looked at several systems recently and decided to take care of all the internal order management by ourselves. We have tailor-made systems, APIs (Application Programming Interface) and so on, where we can easily connect with our service providers,” confirms Hartmann. This illustrates that a lack of homogeneity still exists among different organisations, and whilst not all fund managers like Aquila Capital – who are highly systematic – will chose to develop in-house technology solutions it nevertheless suggests that the
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Risk reporting technology goes mainstream

Interview with Tyler Kim

Historically, risk reporting solutions were developed to cater to the needs of sophisticated portfolio managers that require a broad array of data-intensive reports with which they could evaluate the performance of their trading strategies.

However, with investors, fiduciaries and other stakeholders now taking an interest in understanding portfolio risk, today’s approach to risk reporting must adapt to ensure relevancy to a broader audience.

“Risk management software solution providers that try to be all things to all people are facing an uphill battle,” says Kim. “The audiences for risk reporting are becoming increasingly diverse. Each client has its own nomenclature and investment philosophy. To be of value, their reporting systems need to reflect that.”

Kim believes that a bespoke approach to risk reporting is the answer that many institutional investors and investment teams are looking for. Rather than focusing on the development of a single software solution that tries to anticipate all the functionality that clients may need, Maples Fund Services takes a collaborative approach that offers clients the skills of their consulting professionals and software developers to design and build individualised on-line dashboards, data aggregation solutions and risk reports.

“People looking at portfolio risk reports want to feel like instant experts in what’s happening, not confused by what they’re looking at. If the end users of the data contribute to the design of a report, it becomes a lot easier for them to relate to,” says Kim.

Maples Fund Services’ technology solutions are augmented by a global team of middle-office and accounting professionals in Hong Kong, Dublin and Montreal that work across time zones to perform the data management necessary to produce reports on a timely basis. “Timeliness in risk reporting is critically important,” stresses Kim. “It’s less valuable to know something after it’s too late to do anything about it.”

In addition to data loading, augmentation and reconciliation, Maples Fund Services’ middle-office staff summarise the observations gained while compiling reports and working with the data, providing an independent set of insights about portfolio activity for their clients. Such insights can help to enhance portfolio oversight in areas such as strategy drift and mandate compliance.

“While reviewing the top positions contributing to a client’s managed accounts program’s gains, one of our analysts noted that one manager had done particularly well on a short of the Egyptian pound,” recalls Kim. “In this instance that manager was hired for their expertise in equities, not currency trading. It created the opportunity for some interesting dialogue with that manager.”

The provision of enhanced reporting to both managers and investors is a logical extension of the fund administration services that Maples has traditionally provided. New capabilities that Maples needed to develop for risk reporting included the ability to consolidate data across multiple portfolio and/or funds, and combine information from disparate data sources such as administrators, custodians, prime brokers and market data vendors.

For administrators like Maples, risk reporting is representing a new opportunity for business growth through concentric diversification. “In addition to providing us with a new service that we can offer to existing fund manager clients, consolidated risk reporting has opened up the institutional investors themselves as a new client base for us.”

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industry is still some way from being able to systematically integrate the workflow.

Andy Seaman, a partner and portfolio manager at London-based Stratton Street Capital would like to see brokers and custodians use a standard way to communicate with themselves. He says the firm uses thinkFOLIO for its front-office operations, which communicates with custodians using FIXML. However, like Hartmann, Seaman notes that not all custodians necessarily use it. “Unfortunately what that means is when you want to send trade files everyone wants them in a different format. As a relatively small firm we have to do enormous amounts of work trying to integrate with large organisations,” says Seaman.

The advantage to FIXML is that it is able to translate certain words using a dictionary so if one party uses ‘broker’ in the codes and another party uses ‘dealer’, for argument’s sake, FIXML is able to translate one into the other. “It would make everyone’s lives easier if a standard like FIXML was used but for some reason banks and custodians want their own,” adds Seaman.

As if lack of standardised communication weren’t bad enough, the fact that managers today are using multi-prime relationships simply compounds the issue. Hartmann confirms that the OMS used by Aquila sends orders electronically via an API to the firm’s execution management system, which is multi-prime. Sending orders out, it seems, isn’t the issue. Rather, it’s getting them back efficiently. “When we ask brokers ‘are you able to send me the commissions of the transaction within the FIX drop copy in real time?’ still most of them say no. That’s because the confirmations and commissions data are always in the middle- and back-office not in the front-office. Many brokers aren’t able to deliver on this but they’re working on it,” says Hartmann.

To overcome the problem, after the transactions Aquila Capital receives something similar to a CSV file, which gets inputted directly into its databases to give a summary per market at the end of each day. “It was something we asked for and we’ve been running this for the last 12 months now,” confirms Hartmann.

“One of the challenges we face in the

As a relatively small firm we have to do enormous amounts of work trying to integrate with large organisations.”

Andy Seaman, Stratton Street Capital

world of daily deliverables is ensuring good connectivity to broker data is available and timely. In order to deliver trade, position and cash reconciliations pre-market open on trade date + 1 it is essential that the process of loading broker data to reconciliation tools occurs seamlessly and in an automated fashion. Considering the amount of clientele who multi-prime and have many broker/counterparty relationships it remains a continuous obstacle in avoiding situations where we are forced into manual work and intervention,” asserts Mulhern.

Without doubt, ramping up the middle-office risk reporting function has become a key trend recently; administrators are having to move quickly to keep ahead of the competition. Again, timely reporting is key, but so is the way in which managers can use the products to meet their needs: chief among them using dashboard tools and applications on tablets and iPads.

Last month, Custom House Group decided to partner up with Nirvana, a risk platform provider in the US, increasing the firm’s ability to provide risk reporting, analytics and analysis for its clients. David Barry, EMEA Head of Sales & Marketing at Custom House, says: “Nirvana is a middle-office/reporting/risk solution for fund managers. We’ve always wanted to provide clients with more real-time information and should a client potentially want intraday information we can now provide it.”

Nirvana has a touch screen element meaning clients can use their iPad to view information e.g. for an equities-focused manager using OMS, as soon as they place a trade it goes directly to Nirvana who will then corroborate that information, price it and send it back to the client. “From a risk perspective it gives both the manager and investors more frequent, real-time risk information (VaR, stress testing) and portfolio information, P&L information, all on a touch-
screen interface. When we pitch these services to new clients and existing clients they’re extremely interested as investors seek greater transparency,” confirms Barry.

Seaman notes that one of the significant changes in Stratton Street is the move into Apple-based products, confirming that the majority of staff have iPhones and/or iPads. These devices are fast becoming part of the business architecture, particularly with respect to doing investor presentations. “We currently use an application called Dropbox during presentations where we can pick from a number that have been pre-loaded and use them on the iPad. This gives you the ability to flick from one presentation to another, allowing you to quickly answer questions by calling up the relevant slide. I also like Roambi, an application that takes spreadsheet data and turning into eye-catching charts.”

The whole mobile device/cloud computing trend is interesting and a more engaging counterpoint to the other more pervasive challenge facing hedge fund technology: regulation. There’s plenty of it: MiFID II, AIFMD, FATCA, UCITS IV, Form PF, UK Bribery Act. Of them all, Form PF currently represents the greatest challenge. Technology vendors are relying on administrators to help them keep on top of things, and even though it’s ultimately the responsibility of managers to do their Form PF filing, they too are reliant on their administrators to come up with solutions.

GlobeOp have recently launched such a solution but Maples FS CIO Tyler Kim doesn’t think it’s easy to build a boilerplate solution that meets everyone’s needs. This is because Form PF presents a data gap challenge. Administrators like Maples FS can load data directly from their accounting engine for certain parts of Form PF but there’s a whole set of information that needs to come from the managers that no administrator ever gets into its system: for example, percentage of OTC swaps cleared through a CCP.

“Any vendor or administrator developing a Form PF solution will face the same challenges: about 60 per cent of the form can be populated based on data derived from within a portfolio accounting system (NAVs, exposures) but then there’s the residual part that we don’t typically have the data for. These responses need to be provided by the manager and may require judgment calls. We can help managers understand what they need to provide versus what we can provide: that’s as far as we can go,” says Kim.

Mulhern estimates that administrators have between 50 and 70 per cent of the data for Form PF. To bridge that gap, Butterfield Fulcrum has, over the last 10 weeks, been building its own Form PF solution with a technology provider whose identity cannot be revealed. “The technology will bolt onto our web portal and so the access will be there for our staff, and for the clients. The emphasis has been on data aggregation capabilities and being able to seamlessly import data from Advent Geneva, Paladyne and other sources for proper presentation in Form PF: that’s where the real challenges are and that’s what we’re dealing with right now,” asserts Mulhern.

Aquila’s Hartmann states that risk reporting in response to this new regulation will be a continuing theme in 2012, if not beyond. “You have to have your portfolio reconciled in real time as much as possible and have a good engine to run reports. Reports need to be specific and the time taken to send them out to investors should be as short as possible with manual input kept to a minimum.” It’s the reconciliation between administrators and custodians that needs to be improved thinks Hartmann.

Reporting aside, Hartmann notes that trading algorithms traditionally used in equities markets are now starting to apply to derivatives, for example using VWAP for futures orders: “This is something new. You can only use these algos in liquid futures markets. Whereas previously we had an execution trader working such orders over a 30-minute period, we’re now using a TWAP (Time Weighted Average Price).”

“We looked at several systems recently and decided to take care of all the internal order management by ourselves.”

Norman Hartmann, Aquila Capital

INDUSTRY
Key themes for e-trading desks

Trading algorithms are nothing new. But the way they’re being used is changing, with managers today requiring more and more customisation. From a technology perspective, this is putting sell-side institutions under greater pressure. Algorithms have to behave in the right way for a particular trading account in a particular market. Buy-side traders know exactly what they’re getting when they initiate an order.

The only downside to customisation is that transparency can become something of an issue; quite simply, running multiple algos with multiple brokers can quickly become an operational headache. “It’s starting to become a case where some clients are reluctant to do too much customisation because it makes it more murky and confusing in terms of what they have set up with different banks. They will find their preferred brokers for certain market sectors and particular styles of trading and rely on those relationships as a key part of their automation process,” explains Owain Self, Global Co-head of Direct Execution, UBS.

As the trading environment gets more fragmented and regulated it is putting added pressure on brokerages to meet buy-side needs. Customisation is helping achieve this, and with sources of alpha becoming ever harder to find, traders want algos to find not necessarily the fastest liquidity, but the right kind of liquidity. Brian Gallagher, head of European electronic trading at Morgan Stanley recently said that the issue was not about better algorithms “but better usage of algorithms” and knowing when to use the right kind of algos in different periods of volatility.

“When there’s a lot of liquidity around people will tend to trade in non-displayed dark venues but as liquidity dries up what you tend to find is they have to resort to trading in lit venues (trading facilities offering trading via a visible order book) that will often dictate their algo choice. Traders are using algos that manage that balance for them and ultimately execute according to their liquidity objective – find the liquidity, and if you can’t, resort to the lit venue,” says Self.

Another area where brokers are helping the buy-side community is the use of algos not just for execution but automating small orders. This is helping managers focus more on larger orders where they can make a real difference in improving overall fund performance. Brokerages can effectively analyse trade flow and evolve the algos so as to improve execution on those smaller parts of the business. Not only does the trader benefit by adding value to larger trades but their broker(s) is able to optimise the smaller trade flow.

“That’s actually been pretty popular over the last 12 months. Every time I speak with a client they’re looking to move into that space and automate some of their small order flow,” confirms Self.

Even if traders don’t request customisation, brokerages still have to adapt quickly to ever-changing market conditions and evolve their algos accordingly to ensure clients get a consistent product. And in terms of future technology developments, Self thinks they will continue to follow the same key themes as last year – developments in customisation, in multi-asset trading (fixed income/futures/FX), and multi-stock trading (using portfolio algos).

“People get frustrated that you refer to the same themes but these things don’t happen overnight. The algos used in 2001 are nothing like those used in 2004, 2007 and 2011. Brokerages have started to deliver different asset class algos, portfolio algos and customisation and things are evolving at a significant pace.

“I also think execution consultancy – analysis and evolution of the buy-side trading process – will be an important theme where technology will play a big part. In the past it’s been more human-based but one of the newer themes we’re going to see this year is that process becoming more technology-advanced, more scientific,” adds Self.

Another interesting future technology trend that banks will need to address is the curious issue of trading the Chinese currency, which, due to its application in the local domestic market (RMB) and offshore Hong Kong market (CNH) means it has two distinct currency tags. In February, Stratton Street launched a CNH class for its Renminbi Bond Fund. However, at present banks only have one SWIFT code for the currency, and this, thinks Seaman, will be a problem banks will need to overcome.

“They’re going to have to change their systems in order to cope with two currencies and one SWIFT code, some kind of a qualifier. I’m sure different people will have different solutions. It’s a unique problem: it’s not every day a currency like that comes along. Northern Trust, who administrates the fund, has luckily cracked that problem for us.”