

Demystifying Liquidity Management

Ever since the Markets in Financial Instruments Directive (Mifid) took effect, many new terms have been added to the trading lexicon. The latest, liquidity management systems (LMSes), is still in the process of being defined. *DWT* has assembled a panel of experts consisting of Steve Grob, director of strategy for Fidessa; Valerie Bannert-Thurner, Skyler Technology's managing director Europe; and Harry Gozlan, founder and CEO of SmartTrade Technologies, to clarify the issues surrounding LMSes.

What is the importance of liquidity management? Is it just marketing hype?

Valerie Bannert-Thurner, Skyler Technology: Liquidity management is not hype. Rather, it is an opportunity for firms to achieve better execution prices, thereby increasing returns. Today, finding the liquidity to achieve the most efficient execution is a problem. This problem is due to the drastic structural changes triggered by the E.U.'s Mifid and U.S. Securities and Exchange Commission's Regulation NMS (RegNMS). This shifting landscape is particularly evident in Europe, where Mifid has led to a surge in execution venues, such as the new multilateral trading facilities (MTFs) and dark pools of liquidity. As a result, liquidity has become more fragmented and hidden. This poses both a challenge and an opportunity for market participants. Firms actively adapting to the broadening landscape are discovering that, with the right tools, fragmented liquidity can equal better prices, while firms who are slower to amend their trading habits risk missing out on greater returns.

Steve Grob, Fidessa: LMS has emerged as a term to encompass some of the subtleties that have emerged in trading fragmented liquidity in the post-Mifid environment. These issues include the lack of a single consolidated price feed, the lack of a single definition of fungibility and the need

to tackle all the down stream issues, such as clearing and settlement, associated with trading between primary and alternative execution venues. While LMS has become a buzzword that means different things to different players, the issues are most certainly real.

Fidessa has adopted a holistic approach with its Intelligent Liquidity Access Strategy that provides virtual market depth,

smart order routing, market access and, crucially, a range of "smart workflow" modules. These all interconnect so as to make sure that the benefits of trading across multiple venues can be fully reflected in the business models of our customers and, importantly, our approach allows for the fact that the trading landscape will continue to evolve.

Harry Gozlan, Smart Trade Technologies: No, on the contrary, liquidity management is the key to controlling value, risk and capital spending on most flow-driven businesses in the capital market industry. The term "LMS" has surfaced everywhere, like the term "algorithm" has flourished in many different components.

The concept of LMS encompasses a wide array of services, ranging from liquidity aggregation, intelligent pricing, smart order routing, various execution services, including matching of orders, crossing and internalization, the combination of which addresses a sector of the industry in profound transformation as it becomes more automated and computer-driven.

order flows, as well as complexity of execution strategies, makes it extremely problematic to deal with—without a minimum of automation. This should lead your firm to implement a liquidity management infrastructure, at least partially.

What infrastructure do firms need to have in place before deploying a liquidity management platform?

Grob: Fidessa has a long-term development program around its Intelligent Liquidity Access Strategy that encompasses all the dark and displayed venues that are emerging as well as the ever-changing clearing and settlement landscape. Rolling this out for our whole customer base allows us to provide significantly more functionality than they might be able to access by going it alone.

The first step is making some basic business decisions about how a firm is positioning itself in the new world order. For instance, how smart is your execution going to be? The smarter it is the more valuable your business proposition becomes, but this requires greater investment in direct market connectivity and latency reduction. On the other hand, the cheap option is to simply use the services of a smart broker. However, in so doing, you run the risk of being dis-intermediated as your customers struggle to see the value that you bring to the whole process. One of the interesting phenomenon we are seeing at the moment is



Does adopting a liquidity management strategy necessarily involve investing in a liquidity management system?

Gozlan: As a founder of a liquidity management system firm almost 10 years ago, I would tend to say that not using a LMS makes the mountain rather harder to climb. However, for years, financial institutions implicitly applied liquidity management methodologies in the way they collected their orders, published their liquidity and inventories to the various market centers around them and managed execution processes.

What's different now is that fine-grained measurement of margins, capital exposure, risk, return, speed and volume of

the rise of “smart venues” that offer to onward route any flow that doesn’t match on their platform. These venue broker-dealers may well become the operating model of the future, particularly as the boundaries between the buy- and sell-side continue to blur.

Gozlan: Life is much simpler when there is a uniform transport layer, and when there is a harmonization of the message protocols through a set of homogeneous-message APIs.

Bannert-Thurner: Fundamentally, the top priority of a liquidity aggregation system needs to be delivering up-to-date, reliable, and actionable aggregated liquidity information to trading systems.

As one of the most important aspects, buyers must look at the performance delivered by the application. In the U.S., Level II market data rates are projected to exceed 600,000 messages per second by next year. In addition, the competitive race for low latency

for aggregation solutions that are global in scope. Skyler’s C3 Liquidity Discovery solutions support North American and European market structures, meeting regional requirements, such as different trading types, multiple currencies, different settlement lines, etc., while operating from a single interface.

How does liquidity management differ from smart order routing (SOR)?

Grob: Smart order routing is a part of any liquidity management strategy. Typically SOR is concerned with intelligently breaking up orders and sending them on to different venues. This is only part of the story. You still need to be able to feed the resulting multiple executions all the way through to the back office whilst still associating them with the original order. Each execution will need to reflect the different trading fees and clearing regimes of the venue concerned. Another crucial part of the process is being able to “rewind the tape” and see exactly how and why an order got executed as it did. Obviously this is central to any best execution policy and one that is often overlooked by pure SOR vendors. It’s vital that firms don’t implement SOR systems thinking that they will be getting a one-stop solution for all the challenges of trading across multiple venues. A SOR system without a complete smart workflow strategy behind it isn’t going to get you very far.

Gozlan: Frankly, and this may surprise many people, SOR is only one aspect of liquidity management, which realistically comprises four functions. They include the rules-based generation of the trading

instructions —multi-leg/single leg, order type, execution condition, request-for-quote (RFQ) versus placed order versus quote—after liquidity has been intelligently aggregated for decision-making purposes.


Secondly, the smart order routing towards internal as well as external venues or market-making centers, automated and piloted by rules. This for us is really viewed as an order orchestration mechanism, a musical maestro if you will, more than pure routing, as it implies a fine-grained management of the states of all primary and secondary orders.

Next, there is internal crossing/matching, in some case within a dark pool of liquidity. And last, the connection to the final venue where instructions are candidates for final execution.


How do liquidity aggregation systems typically integrate with the existing market data and trading infrastructure?

Bannert-Thurner: Skyler’s intention is not to replace any of the existing market data or trading infrastructures, rather to complement and enrich them with comprehensive, low latency and reliable liquidity information. To achieve this, Skyler’s C3 Liquidity Discovery solution comes with a host of adapters that interface to standard market data, messaging, and trading infrastructures. In addition, Skyler offers ultra low latency embedded feed handlers to the US direct exchange feeds and a specialized architecture to address very specific use cases where ultra low latency is of the utmost importance, such as powering order routing

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In some cases, FIX facilitates the preparation of the field. This is why some firms have first worked hard on deploying a full, FIX-compliant infrastructure between the various centers, geographies and business units. FIX is not a necessity if your LMS is really open and possesses various layers of integration and open APIs.

When it is necessary to connect to order management systems (OMSes) and various order-entry applications, instruments and users’ repositories, direct market access (DMA) layers or directly to market venues, post-trade and clearing systems, what helps tremendously is to already have in place such pre-defined systems that are at a minimum open to talk to the “man-in-the-middle,” the LMS.

What are the key aspects of liquidity aggregation that buyers must watch out for?

requires microsecond aggregation speeds. With these factors in mind, buyers need to ensure that the liquidity aggregation application is capable of handling the necessary throughput while achieving critical microsecond latency.

Liquidity-aggregation applications must be flexible enough to allow downstream applications to request different order book views, particularly relevant to comply with the Mifid best execution regulation. Furthermore, it is critical that the liquidity aggregation solution ensures data quality, managing stale quotes, incorrect book states or faulty market data sources. As such, Skyler’s very fast centralized data aggregation and cleansing capability eliminates the burden of market data from the downstream execution systems. Since liquidity fragmentation happens in different regions across the globe, market participants must look

applications within the U.S. market space.

Currently, are most liquidity management platforms managing single asset classes or are they supporting cross-asset trading as well?

Gozlan: They should be cross-asset natively. Otherwise, you create a wall between activities that is totally artificial.

Grob: Most can only handle single asset classes. One of the reasons for this is that fungibility works very differently between asset classes. For example, exchange-traded derivatives can only be traded on the venue that lists them because that venue created and owns those products. This differs completely from the cash equities world where the product, such as Vodafone stock that exists independently of the venues where it can be traded. Having said this, it's likely that the ability to take a view across asset classes will become an important part of any liquidity management strategy. This is certainly in our sights as part of our Intelligent Liquidity Access initiative.

Do LMSes need to be bespoke solutions or can firms rely on off-the-shelf platforms?

Bannert-Thurner: In today's market there is no reason for firms to develop proprietary solutions in the area of liquidity aggregation. In contrast to more generic complex event processing (CEP) platforms, the Skyler system was purpose built for liquidity aggregation. Firms can significantly reduce their time-to-deployment and internal overhead by using Skyler's off-the-shelf C3 Liquidity Discovery system without compromising

speed, flexibility, or architectural options.

Gozlan: They absolutely do not need to be fully bespoke. The off-the-shelf software vendors today—at least this is what smartTrade offers, of course—whatever the space into which they live, have to propose open, customizable systems to their clients. A totally off-

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the-shelf system will fall short when it comes to integrating with internal repositories, an OMS, trading user interfaces (UIs), DMA layers, message middleware, clearing systems, etc. Additionally, it will fall short also in being modular and evolutionary over time. Two questions among many, for example, worth asking first include: should I cross my orders before they are smart routed or after; and, if we want to add a dark pool later into our architecture, how do we modify the rules, change the execution conditions, add an external SOR, etc.

Unless it can prove that it is the best solution in each category—OMS, CEP, LMS and execution management system (EMS)—to me it would not make sense implementing. Understandably, integration of an LMS has to be fairly deep into your firm. Because building an LMS is a very complex exercise and if you want to reach the quality criteria required to meet proper business standards, the best solu-

tion is to integrate your firm's specific LMS components dedicated to this activity into your own "pre-streamlined" infrastructure.

Where should the industry see the initial hotbed of liquidity management?

Bannert-Thurner: Skyler sees extraordinarily strong demand for liquidity aggrega-

tion capabilities in the European market space driven by the advent of increasing liquidity fragmentation across Europe's multitude of new liquidity points. In the U.S., Skyler sees a lot of demand in the area of smart order routing, driven by increasingly demanding throughput and latency requirements which are breaking legacy systems.

Going forward, we see increasing demand for truly global solutions that cover the U.S. and Europe as well as Canada and different regions in Asia.

Grob: There are two areas that will be important over the next year or so. The first of these is the interaction of dark and displayed liquidity. In Europe the "dark-side" is still in its infancy but having a robust strategy to reach across the ever growing number of dark pools will become a crucial success factor moving forward. The second is geography—Reg NMS and Mifid have changed forever their respective domestic land-

scapes for equities trading. Each, however, has gone about achieving the same better execution objective very differently. Being able to reflect, and take advantage of, these differences will again become a crucial hygiene factor for any LMS of the future.

What do you see as the novel trends in deploying such a solution?

Bannert-Thurner: Firms want to increasingly rely on service providers to deal with connectivity and to deliver up-to-date and reliable market data in different formats. Responding to demand for easy to deploy, cost efficient offerings, Skyler has invested in its hosted service, offering an aggregated order book feed in conjunction with market data vendors, such as Fixnetix. As well, we are seeing further opportunity to expand our hosted services to other regions.

Will LMS platforms eventually replace execution OMS platforms?

Grob: I don't believe so. LMS will simply become embedded in quality OMSes in much the same way as advanced trading tools and the ability to handle multiple asset classes have now become "standard" features.

Gozlan: Though we can refine the definition of each job between OMS, EMS and LMS, I would simply say that they are complementary. An OMS, helped even by CEP solutions, generates instructions whose execution is managed by an LMS before sending it on its final leg to outside venues through an EMS. This is how I would explain it, though an OMS can encompass LMS features, and EMS, and vice versa.