

# IT Integration of FX Electronic Trading Platforms: the Impact on the Buy-Side



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*There's a radio ad I frequently hear in the mornings in which the CEO of a major Fortune 500 hardware manufacturer boasts: "change is in our DNA. We don't hide from it, we embrace it."*

Well, whether we like it or not, this is the status quo in the world of FX trading and FX IT. While electronic trading amongst the banks has been in existence for approx five years, we are now seeing a proliferation of buy-side electronic FX platforms like never before. (My last count was 21 offerings!) On many levels, this is causing a collision of the old world vs. the new world. On the trading level it is forcing more and more FX dealers to become familiar and comfortable with trading over the internet and on the IT side it is creating some major integration challenges. And, unlike the equities markets where electronic trading has been around for some time and electronic standards and formats (FIX) have been set, the electronic handshake between FX sell-side and buy-side FX firms has yet to be standardized across all industry participants. This review focuses on the product features and IT challenges that accompany this paradigm shift. It does not address, intentionally, the software costs, liquidity depth, or pricing charges that will vary from vendor to vendor.

## Product Features Matrix

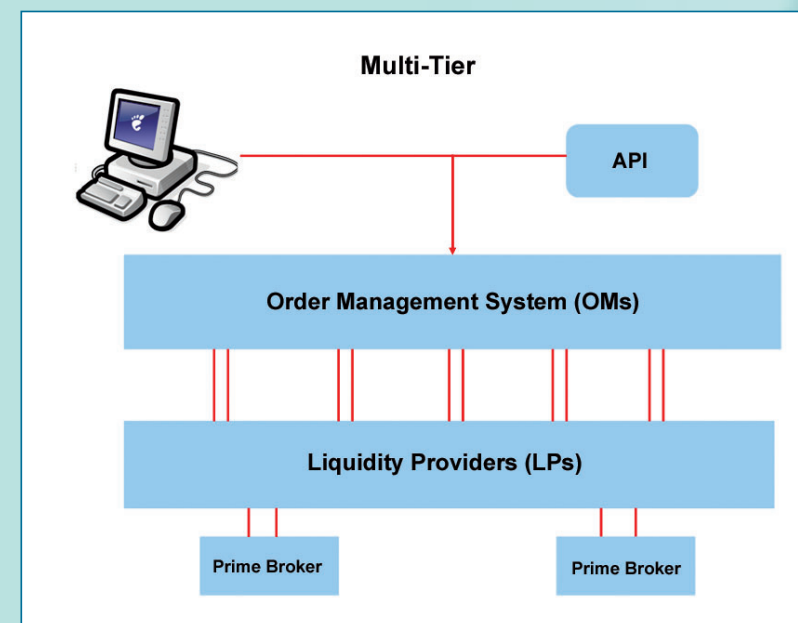
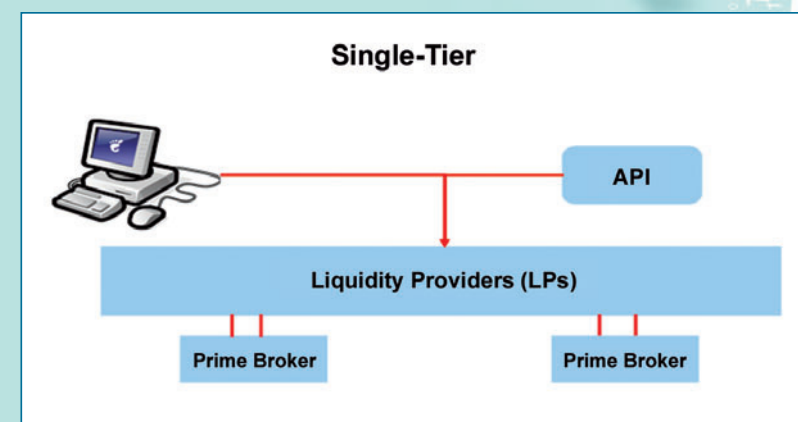
The market can be divided into two main categories: OMS Providers (OMSs) and Liquidity Providers (LPs). However, this distinction is becoming more blurred as many of the liquidity providers are rapidly adding sophisticated OMS features.

	Order Management Systems	Liquidity Providers
<b>Technology Platform</b>	Pure software (broker/bank neutral) solution, package is installed on site and data connections are independently managed.	ASP (web-based). No special installation requirements beyond reliable internet access. Connectivity occurs between banks and ASP.
<b>Algorithmic Trading</b>	Ability to program rules-based trading models <i>within</i> the order management toolkit. Typically this is a pre-defined set of algorithms that can be easily customized. Can also be accessed via an API.	Tends to be more basic order management with emphasis on simplicity. Rules-based algorithms generally have to be programmatically done outside the system and interfaced in via an API.
<b>RFS™/ ESP™</b>	ESP™ (electronic streaming pricing). This is the backbone of electronic trading. Individual banks provide a proprietary price feed into the OMS system and then aggregate multiple feeds from multiple banks. In the OMS solution, the feeds are maintained on-site by your own IT department (with support from the OMS).  RFS™ request for streaming or request for quote). This is older method (but still in use) whereby a specific price request is made to a specific bank).	Similar to the OMS products with two important distinctions: the Liquidity Provider delivers a pre-selected group of banks and actually creates a 'virtual' closed marketplace for each subscriber.  Secondly, the Liquidity Providers handle the RFS™ and RFS™ connections for you.
<b>Price Taker / Market Maker</b>	Buy-side firms can trade anonymously under credit arrangements and name of Prime Broker(s) or trade in own name if so arranged. Can participate as price taker and market maker if desired.	Typically can only trade anonymously under credit arrangements and name of Prime Broker(s) only. Some LPs allow you to participate both as price taker, market (price) maker. On some platforms, orders can be crossed creating a virtual but limited FX ECNs.
<b>Back-Office Integration</b>	Back-office automation is completely open-ended, i.e. workflow must be defined and built. Fills can be delivered to Prime Broker or any other designated destination.	Generally better integration with specific Prime Brokers to help streamline the back-office workflows. However, no off-the-shelf solution exists for the give up and allocations process.
<b>GUI</b>	Tend to be more complex, more geared for rules-based trading. Needs to 'dumbed-down' for straight forward execution/	Very easy to use, advanced web-based interface.
<b>Order Types</b>	Very sophisticated order types, e.g. random slicing, logic based order adjustments, etc.	Basic: stop loss, at best, fill or kill, limit. Note: some of the Liquidity Providers now support some very complex order types beyond limit, fill or kill, at best, etc.
<b>Market Breadth/Depth</b>	Completely dependent on the collection of banks and Liquidity Providers you choose to use.	Varies widely on the group of banks involved. Tends to cover the major currency pairs; currency pairs for developing countries is less available, but growing.

## Making the Choice

It is easy to get overwhelmed by the choices. One key bit of advice is to have a clear idea of your requirements before you begin your evaluations and stick to the products that are the closest match to your business model. For example, if you're looking for a simple out-of-box solution as a replacement/augmentation for telephone dealing then clearly one of the liquidity provider platforms (HotSpot™, Currenex™, FX Marker™, LavaFX®, eSpeed™, etc.) would be a good match.

If you're looking for a multi-tier platform on which to build a rules-based trading system then one of the OMS products (FlexTrade™, PortWare™, RealTick™, Tethys™, LavaFX® ) might be a better choice. These front-ends are not liquidity providers per se but rather act as a conduit to multiple liquidity providers. Finally, you can also go the API route and connect to any one of the banks' ESPs™ directly and/or one of the aforementioned liquidity providers, as they all have an API that can be integrated with your internal systems.



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## Integration – Devil’s in the Details

Often overlooked in the beginning of the process are the back-office integration details. Most FX buy-side firms work within the context of a prime broker whom they rely on for credit, settlements and payments.

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All transactions are given up to one or more prime broker and then further allocated amongst a defined set of funds and/or managed accounts. In theory, electronic trading should be an enabling process for STP (straight through processing). However, the challenge is getting the fills from the execution platform and applying the give up pricing fees and allocation breakdowns for both internal systems and the prime broker(s) – easier said than done.

From an IT perspective, the goal is to piece these components together without creating more internal headaches. The obvious first step is to get all parties together (Vendors, Prime Broker(s), Trading, Operations, and IT) and agree on the specifications/requirements for a seamless trade flows. Once the blueprint is established then the processes need to put to in place to perform these tasks automatically. Some tasks can be programmed directly into the vendor platform such as the average pricing of multiple fills and prime broker all-in mark up fees.

The allocation schedules also have to be integrated (2 levels: Prime Broker splits - if more than one prime broker is involved, and account allocations) It is relatively easy to allocate at the prime broker level but the account splits pose a more difficult problem in that the schedules are typically more fluid. One way around this is to employ a web services SOAP interface such that the vendor can directly access the dynamic allocation schedules via the internet, with proper security, and allocate the fills before sending them onto the prime broker(s). There is no correct answer here as there are many ways to solve this problem. This is just one suggestion. The point is that these are the dirty details that have to be addressed in order to move onto a fully integrated electronic platform.

## In Conclusion

There will be consolidation in the Liquidity Provider space over the next two years because the market cannot sustain this many vendors. Furthermore, EBS Prime™ has come out with a buy-side product that will impact the market significantly. I anticipate that there eventually will be a handful of players each having a particular niche and/or liquidity specialties. There is also no question that over the next 2-3 years the FX trading volumes will shift more and more to the electronic marketplace. Additionally, the electronic standards will converge and, more than likely follow the way of the equities market, i.e. FIX will become the industry standard along with a foreign exchange variety of FDML. (financial derivatives markup language). So the question remains, how will your firm prepare for it and integrate these platforms? If you’ve haven’t thought about it yet, then now is the time to start.

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