Integration with other systems

Given that those firms running significant equities trading businesses have complex internal ecosystems, replacing any individual system inevitably involves connecting it to many others – perhaps several tens of others in the most complex cases. This applies whether the replacement system is built or bought.

Many firms have adopted vendor messaging platforms - TIBCO, Solace, Informatica, for example - which help to solve the many-to-many integration headache at a message transport protocol level, but messaging infrastructure does not solve for the ‘hard part’ of linking together the specific events with the correct fields to achieve the overall solution – the message payload.

Integration thus becomes one of or the most complex aspects of adopting a new application.

A comprehensive set of tools is vital to tackling this challenge effectively:

- Standard input/output APIs (with an ability to enrich these on a per customer basis)
- Robust protocol adapters for FIX, TIBCO, Solace, Informatica
- Contemporary interfaces such a REST
- Dynamic tools that allow firms to be self-serving in performing integration – flexibility and turnaround is key when the systems being integrated are themselves being evolved rapidly, e.g. lightweight analytics applications

Data access

It’s a basic need across equities trading firms that they can get ready access to their own data within any vendor’s trading application. As machine leaning and AI come to dominate the trading arena this will become even more important and so this ability will come to separate the winners from the also rans.

One might expect this to be straightforward, but vendors’ systems are often complex, sophisticated and proprietary to that vendor.
It will become increasingly common for firms to want to import full transaction data sets for integration with other platforms and so standard facilities are needed to achieve this.

Standard data access solutions can be fixed to a specific purpose but it is better if this can be complemented with other lightweight tools and, again, be provided on a self-service basis to customer firms that conform to contemporary protocols like REST.

Customer firms often build their added value with tools like Python and R and so the vendor platform data needs to be accessible from these programming environments.

Having an effective approach to combining different data sources and types is going to become increasingly important and a key source of competitive edge. Unfortunately, though, while our industry is renowned for the amount of data it produces, its record in producing actionable insight from it is far less well-established. Pools of data have become vast lakes, yet having an effective mechanism to manipulate the data swimming around in them remains a challenge.
The problem can be broken down into three core competencies. First, bringing together structured data (e.g. trade files) and external data (e.g. market prices); second, combining this with relevant unstructured data from the digitised world we live in today; and third, providing the visualisation tools and machine learning to derive timely and actionable intelligence.

There are a number of firms that provide solutions to part of this problem, but no one yet has established a complete straight through process for the digital journey that capital markets are embarking upon.

Part 6 explores how the next-gen approach to buy and build is delivered in practice.

Click here to read Part 1: Rebalancing the Paradigm for Global Equities Technology

Click here to read Part 2: Not all vendors are the same - old and new challenges

Click here to read Part 3: Solving the 'who's in control' conundrum

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