

Finucane's Theory of Evolution

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Consolidated datafeed dinosaurs are evolving to escape the same fate as data dodos. By Don Finucane, vice president of product management and marketing, Interactive Data Real-Time Services

The real-time datafeed market is undergoing some of the most significant changes since feeds were originally introduced decades ago, forcing market data vendors to radically change their product offerings and business models—or risk extinction.

External factors are combining to force fundamental changes in the DNA of data vendors—a species that has already seen its share of annihilation as a result of, among other things, an inability to adapt to changing conditions and the superior competition that ultimately consumed them.

Environmental changes in the form of market evolution and technological advances are transforming the securities industry, but are also disrupting the real-time market datafeed ecosystem, and threatening the robustness and resilience of the vendor species. Datafeed providers are being forced to change their stripes in real time when faced with rapid market data volume growth, expansive new regulations, the advent and widespread adoption of electronic trading—particularly algorithmic trading—and the resulting necessity for ultra-low-latency data.

The unprecedented and unrelenting growth of market data volumes is well documented. Computer systems are auto-generating—and cancelling—thousands of quotes per second; algorithms are slicing single large orders into many little ones; OPRA options data volumes are skyrocketing; and exchanges continue to spawn new products, particularly high-volume market depth data, further compounding the situation. Those that do not evolve in this environment can be devoured, and vendors will need to make large investments in ticker plant infrastructure and distribution systems to survive in the game, where many legacy systems will go the way of the dodo.

The downstream impact of new regulations is also having a direct influence on datafeed vendors. Reg NMS in the US, and the Markets in Financial Instruments Directive (MiFID) in Europe are bringing about some of the biggest changes to market structure in a generation, and are changing the way that data is generated and consumed. Reg NMS' order-protection rule requires that orders be routed to the trading venue with the best executable price, leading to further fragmentation of execution venues, more emphasis on latency, and generation of more quotes in an attempt to chase revenues. To be competitive, datafeed vendors must connect to more trading venues, handle increasing data volumes, and—of course—reduce latency. MiFID promises a similar and equally monumental impact on the market data arena.

The rapid adoption of electronic trading and the growth in ECNs and other electronic venues has also been instrumental in changing market structure and market data distribution. With the ability to computerize and automate trading, I believe that the brains of the algo-creating quant outshine the brawn of the floor broker. But these new, sophisticated algorithms need ultra-low-latency data in order to out-trade the competition. In some cases, datafeeds from the traditional market data vendors are considered too slow for these money-printing, black-box algos. Some firms have elected to source data directly from exchanges, bypassing data vendors to obtain faster data. The future of the consolidated datafeed provider had, at one point, been brought into question. Market data vendors needed to adapt.

And adapt they have. Seeing the market need for ultra-low-latency data, key real-time feed vendors have introduced plans for direct exchange services to complement their consolidated datafeeds. Such direct solutions can be ideal for firms that need ultra-low-latency data while the vendors are also experienced in the complexities and nuances of developing to and maintaining exchange feeds, and can spread the development and maintenance costs of direct exchange feeds over a large client base, as opposed to a firm having to underwrite that considerable expense just for its own internal use.

Of course, as with consolidated datafeeds, there can be key differences in the direct feed offerings of the major vendors, and firms should weigh the pros and cons of each. Interactive Data's DirectPlus, for example, is a hosted solution designed to offer access to sub-one millisecond data sourced directly from exchanges, which allows clients to co-locate their electronic and algorithmic trading applications at BT Radianz's data centers, minimizing data latency by ensuring the close proximity of these applications to both the exchange on which the firm is trading and to the source of data delivery.

Other benefits of the hosted model include reducing market data infrastructure costs for the client, and eliminating the communications costs of getting the data from the exchanges to the hosting facility. And of course, there is a considerable cost benefit of not having to program to and maintain multiple exchange feeds, which change on an all-too-frequent basis. For example, one major US equity exchange announced 32 feed specification changes in 2006.

It is encouraging to see that many of the datafeed vendors at the top of the food chain are taking steps to ensure their place in the market data ecosystem for some time to come.... Darwinism at its best!