

# The Buyside and the Three Phase-Evolution of Electronic Trading

PETER CURLEY

PETER CURLEY is product manager at Advent Software in San Francisco, CA. [pcurley@advent.com](mailto:pcurley@advent.com)

The U.S. market trading environment is in the midst of a fundamental paradigm shift. Historically, there has been a clear separation between the roles played by the buyside, their sellside brokers, and the exchanges. Today those lines are being redrawn and the distinctions between the parties blurred. Buyside firms are assuming ever greater control over the execution of their trades, encroaching on territory that was once the sellside's preserve. Meanwhile, the market structure itself is changing rapidly, in the shape of merger-driven consolidation propelled by the New York Stock Exchange (NYSE), NASDAQ and the Chicago Mercantile Exchange (CME), broker investments in regional exchanges, and the ongoing emergence of alternative trading systems (ATs).

At the intersection of all these changes stands the buyside trader, who is charged with assuming the sellside's execution mantle as the industry wrestles with achieving the ill-defined concept of "best execution."

The objective of this article is i) to present the buyside with a framework in which to understand these changes, ii) to offer a vision for the trading platforms that will support this new world, and iii) to explain why the future belongs to independent broker-neutral systems supplied by software firms rather than to sellside brokers.

## THE EVOLVING BUYSIDE/SELLSIDE RELATIONSHIP

Traditionally, the buyside's primary role has been to gather and manage assets from investors. The sellside broker's task was putting the portfolio manager's buy and sell decisions into practice, thus acting as intermediary between the buyside and the actual execution venue. Once completed, execution information would be transmitted back through this chain of command all the way to the buyside client. For the buyside, however, trade execution and pricing remained shrouded in mystery.

Today, that separation of duties is no longer so clear-cut: a radical shift is in progress. Buyside firms—to varying degrees—are taking control of the execution function, whether by connecting directly to trading venues or by interacting with the sellside through more 'low-touch' electronic channels.

## WHAT IS DRIVING CHANGE?

Why is this relationship between buyside and sellside changing? Three main factors drive this shift:

- Cost
- Regulatory pressures
- Concerns over information leakage

## Cost

Not surprisingly, cost is one of the factors driving change. Execution costs are comprised of two components: i) explicit items such as commissions and tax, and ii) implicit elements relating to the market impact of a trade and its opportunity cost. Both items propel the buy-side's evolving execution policies.

- i. *Explicit Costs*—in the traditional execution model, where the bulk of the buy-side's order flow went to sell-side block trading desks, execution cost an average of five cents per share. In today's world, by contrast, the buy-side has access to a range of cheaper electronic options, be it direct market access (DMA) and algorithms, at approximately one cent per share, or crossing networks that typically charge between two and three cents per share.
- ii. *Implicit Costs*—their intangibility means such costs are more difficult to measure, yet the buy-side increasingly believes it can do at least as good a job as the sell-side in minimizing market impact.

## Regulatory Pressures

The big news in the U.S. is Regulation National Market System (Reg NMS). Under the regulation's trade-through rule component, equity trades must be routed to wherever the best "top of book" price is quoted at the moment the order is entered. The goal is to ensure that investors obtain the best price for their trade executions. The upshot—when implementation of the trade-through rule begins in Spring of 2007—will be a marketplace in which the decision about where to route a trade will be based solely on price. This leveling of the execution venue playing field will likely provide opportunity for new market entrants and cause further fragmentation.

Reg NMS is only one of a raft of new regulatory measures—along with initiatives such as the European Union's upcoming Markets in Financial Instruments Directive (MiFID) and the SEC's review of soft dollar practices all of which share a common objective, namely to shed light on the true cost of execution. With this regulatory theme looking set to continue for the foreseeable future, there will be ever greater forces propelling the buy-side down the road toward execution self-sufficiency.

## Information Leakage

Within the buy-side community there is a long and widely-held belief that the sell-side's control of the execution function has allowed its proprietary trading desks to profit from information provided by asset manager and hedge fund clients. In an electronic model, however, where the process is controlled by the buy-side, there is far less information leakage.

Taken together, these driving forces are already having a profound impact on the trade execution landscape. Today, according to *TowerGroup*, only 24% of buy-side order flow is phoned into the traditional sell-side block trading desks. Instead, electronic channels such as algorithms, crossing networks and DMA are seeing rapid growth within the buy-side trading community to the point where the *Aite Group* forecasts that by the end of 2010, 53% of both buy-side and sell-side trading will be done through algorithms.

## MARKET STRUCTURE ON THE MOVE

For the buy-side, the desire—and indeed the need to take more control of the execution process—is happening at a time of radical change in market structure. Most notable are the concurrent movements toward market consolidation at the exchange level, and fragmentation caused by new entrants to this dynamic marketplace.

Merger activity remains the central theme at the exchange level. Market venue operators seek to satisfy buy-side and investor demands by expanding their reach into new asset classes and new geographies. A prime example is the NYSE. Having completed its merger with Archipelago early in 2006, the Big Board has now set its sights on international expansion, with pan-European operator Euronext its first target. Euronext owns multiple exchanges across Europe and, crucially, the London-based derivatives exchange LIFFE. For the NYSE, therefore, Euronext offers a ready-made entrée both into the European arena and the booming derivatives world. Meanwhile NASDAQ, having already acquired Instinet Group's ECN subsidiary INET, now seeks to build its international business by purchasing the London Stock Exchange. Finally, the trend toward consolidation was further underscored with the news in October that the Chicago Mercantile Exchange (CME) is buying its long-time rival, the Chicago Board of Trade. The deal will

create a \$25 billion derivatives behemoth, making the re-titled CME Group the largest futures market in the world.

All these market structure changes by themselves, however, do not address the fundamental requirement of the buy-side community: to locate institutional-sized liquidity quickly and at a reasonable price. Unfortunately for the buy-side, it is becoming increasingly difficult to have their unique needs met at the traditional execution venues. In recent years both NYSE and NASDAQ have seen their average execution size plummet to around 400 shares. This has been caused by the introduction of decimalization and the rise of order slicing algorithms. The picture this paints is of a market structure increasingly aligned to the interests of the retail investor. In response to this, we see the emergence of firms whose sole purpose is to build execution venues designed exclusively for the buy-side. The success of firms such as *Liquidnet* and *Pipeline* is attracting new entrants to the marketplace, which will result in continued fragmentation of market structure for the foreseeable future.

## THE TRADER'S DESKTOP

Nowhere is this new world more apparent than on the desktop of today's buy-side trader. Five years ago traders performed their job with a traditional order management system (OMS) and a market data feed. Their new execution-focused role, the super-fragmented market structure, and the best-execution requirement make clear that today's world is much more complex. It is not uncommon for a trader to have multiple front-ends on their desktop composed of tools such as EMS', DMAs, algos, transaction cost analysis tools and risk systems—all used in conjunction with their OMS system. Managing an order through such a collection of disparate technologies is no easy matter, particularly when none of these systems were built to speak to each other.

## THE THREE-PHASE EVOLUTION OF ELECTRONIC TRADING

We see electronic trading evolving in three phases. The providers of tomorrow's trading platforms to the buy-side will be the firms that are successful in removing from the trader the integration complexity of today's tools while concurrently enabling the achievement of best execution.

### Phase One—Componentized Complexity

To date, brokers and software vendors have focused on creating ad hoc components to help buy-side traders do their jobs. The problem is that these components address only specific pieces of the puzzle. Firms today can buy a range of best-of-breed tools, but together they create an unwieldy patchwork of applications, which leaves the traders either managing the different parts manually by “swivel chair” integration, or attempting to stitch them together using the FIX protocol.

### Phase Two—The One-Stop Shop

The next phase—evidence of which is already emerging—will be characterized by broker-provided ‘one-stop shops’ in which agency brokerage capabilities are combined with various software tools that support pre-trade analysis, order management, execution and post-trade analytics. Such models, with their suites of tightly-integrated products, offer a compelling alternative to the buy-side's hitherto disparate system environments, by taking the integration complexity off the buy-side trader's hands and replacing it with a unified solution. This approach is made even more attractive by offering most of these tools at no upfront cost.

However, this combination of access and execution services comes with one major drawback. The broker's pay is contingent upon driving order flow to proprietary execution services, which means it is not in a broker's interest to open these systems to competing brokers. That will immediately limit choice, creating a problem for the trader whose primary interest is to obtain best execution, wherever it might be found.

### Phase Three—Broker-Neutral Trading Platforms

Successfully balancing the demand for reduced technology complexity while simultaneously satisfying traders' best execution requirements will therefore depend on the emergence of an alternative approach. In phase three, true broker neutrality is combined with the functionality of today's order management and execution management systems. Such open systems, provided by independent software vendors, with no broker conflicts, will thus offer a clean separation between access and execution services. The one drawback will be the need to pay upfront

licensing fees. However, this should be at least partially offset by lower commission rates, since the buy-side will have open access to multiple competing brokers.

## TOMORROW'S TOOLS

Phase three, then, is the goalpost. Although the vision exists, the technology capability is not yet there. Instead, the different trading components currently in place will require significant alteration before the requisite buy-side trader environment can become reality:

- *OMS/EMS*: These platforms will provide the architectural backbone that supports the emergence of phase three in the trading evolution. Traditionally, order management and execution management systems have existed separately, operating on different workflows. Going forward, the functions of the two will blend, forming the core application into which the various other tools will plug.
- *Algorithms*: The first generation of algorithms, predominantly volume weighted average price (VWAP) or arrival price, were rudimentary—basically slicing up orders over a certain timeframe—and thus not suited to illiquid stocks. New formulations will be liquidity-seeking, portfolio-based and adaptive.
- *Transaction Cost Analysis*: At the moment, TCA tools tend to be broker-specific and do not offer a complete picture of the quality of execution across multiple brokers. These systems are also constrained by the quality of the data collected and fed into them. This situation will change as independent vendors begin to enter the space and the tools become more integrated with trading platforms.

- *Crossing Networks*: Today, crossing networks suffer from low execution rates and a certain amount of information leakage. In the future, crossing networks will boost their execution rates by merging their models with other liquidity sources such as Liquidnet's 'streaming liquidity' concept. In addition, we will see portfolio-based crossing networks able to handle baskets of securities.

## CONCLUSION

The two main forces of cost and regulation, combined with the ever more complex market structure, will continue the buy-side's push toward the insourcing of the execution function and the adoption of electronic trading. Regulation and cost will also determine who provides the execution platforms of tomorrow. We believe that regulation, and in particular the best-execution requirement, will trump cost and result in the majority of execution platforms being supplied by independent, broker-neutral software firms. The buy-side trader's role will continue to evolve as we work our way through the different phases of this trading revolution. The trading community's interests will best be served if we are all aware of the inherent tradeoffs contained in each phase and understand the great opportunities this new world will offer.

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