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How an OEMS Helps Buy-Side Firms Achieve Best Execution

A new generation of Order and Execution Management Systems is designed to precisely capture and allocate clients' orders, with extensive execution details captured in an internal database, to help investment firms better comply with their best execution policy. How does an OEMS help traders better serve the needs of their fixed income clients and ensure that firms comply with emerging regulatory requirements?

Complying with an ever-expanding set of regulatory requirements is imperative for buy-side firms. A new generation of Order and Execution Management Systems (OEMS) is designed to precisely capture and allocate clients' orders, with extensive execution details captured in an internal database, to help investment firms better comply with their best execution policy. This article examines how an OEMS helps traders better serve the needs of their fixed income clients and ensure that firms comply with emerging regulatory requirements.

Best Execution Requirements

Financial institutions act as fiduciaries to their investors and clients. In the execution process, buy-side traders need to demonstrate best execution, adhere to their firms' best execution trading policies, and perform fair dealing across all client accounts. Broker-dealers are obligated to provide best execution opportunities to buy-side clients as well. In the US market, both [SEC](#) and [FINRA](#) have articulated the responsibility of broker-dealers to provide best executions that are "reasonably available." According to [CFA institute's trade management guidelines](#), best execution is defined as "the trading process firms apply that seeks to maximize the value of a client's portfolio within the client's stated investment objectives and constraints."

In the recent development of the EU's MiFID II regulation, the Financial Conduct Authority (FCA) set out additional guidelines on best execution in its [Conduct of Business Sourcebook \(COBS 11\)](#). Trading venues, System Internalizers and liquidity providers are required to disseminate data relating to execution quality free of cost. According to [ESMA regulatory technical standards \(RTS\)](#), firms have to publish their top five execution venues annually and demonstrate they have complied with the execution policies of both their clients and regulatory authorities. It asks firms to take "sufficient" steps, instead of "reasonable" steps, to seek best execution opportunities, which suggests that firms have to review their current practice, or even come up with a MiFID II-oriented policy.

Best Execution Factors

There are many factors to be considered when evaluating order execution quality:



- Client instructions, including client mandates and restrictions
- Price offered by the market, costs associated with the transaction and brokerage fees
- Speed of the execution, the type of marketplace and location
- Liquidity of the market, measuring the capability of additional transactions with little impact on the current price level
- Size of the order
- Likelihood of settlement

An OEMS provides direct market access via connectivity to electronic trading venues and liquidity providers, and aggregates quotes and inventory on a centralized platform. It provides the analytical tools and a data repository for investment firms, especially traders, to make more informed execution decisions.

A Best Execution Framework

The essential framework of best execution policy includes price discovery, broker and venue selection, execution analysis, and result monitoring and reporting.

Market assessment is the first step in price discovery. This involves understanding the nature of the security; analyzing the risk associated with the market, the issuer's country and the location of the exchange; and how well the scenario correlates with the defined investment mandate and strategy. Particularly in fixed income markets, liquidity assessment is a crucial factor. Without a centralized pricing source or exchange, traders need to utilize many types of market data to determine best execution opportunities. One important data source is dealers' inventory runs and indications of interests (IOI).

Traditionally, dealers sent inventories to buy-side firms via emails, different types of files, and FIX messages.

An OEMS with an inventory aggregation solution removes buy-side firms' technical overhead and the dependency on the antiquated and error-prone manual process. The OEMS aggregates indicative prices streamed directly from the dealer community and disseminates this data to all buy-side clients. This allows traders to assess the market in real time. More important, it leaves an audit trail after execution, so clients can navigate to the historical execution and look up the inventory profile when the trade was placed, executed and allocated. Data from an OEMS provides both portfolio managers (PMs) and traders with a detailed analysis of pre-trade, trade time, and post-trade price movement. A liquidity score for a particular security can also be calculated.

As part of the pre-trade decision support and compliance checks, the new-generation OEMS provides PMs with a more efficient and cost-effective pre-trade analytics engine to initiate investment ideas and perform what-if scenarios. It helps PMs monitor the average daily trading volume and risk sensitivities. PMs can set up price limit, duration targeting and adjust order instructions based on outputs from the analytics engine.

Price has long been considered the most popular factor for gauging best execution. In auction-based trading venues, traders are able to receive multiple brokers' competitive bids/offers simultaneously. A request for quote (RFQ) process is usually adopted in this case. In fixed income, where an order is not placed via a trading platform directly, the general practice is to obtain at least three quotes. An OEMS, which captures not only voice quotes, but also electronic quotes, enables buy-side traders to conduct due diligence before execution.

Quote-level data processing, such as best quote indications, help traders quickly identify the best bid/offer and prevent fat finger errors. Streaming quotes from dealers can eliminate the risk of exposing client order size before execution as well. Traders are able to view a dealers streaming prices before committing to trades. This also facilitates odd lot executions. For small size orders, a low-touch/automatic execution workflow supported within the OEMS may be used. This helps traders source the best bid and offer from a range of dealers without manual intervention, according to predefined trading criteria.



In a 2015 keynote address, SEC Chair Mary Jo White emphasized the development of public price transparency in fixed income markets. TRACE and MSRB data are widely used to evaluate US corporate bonds and municipal bonds markets. With the integrations to those data repositories, an OEMS provides a collective view of the market data and presents the relevant information for securities on the trading book.

Broker and Venue selection involves a collaboration among trading, operations and compliance teams. It starts with a broker approval process, in which compliance and trading work together to compile a matrix of qualitative and quantitative attributes that determine whether to add a broker to an approved list, based on asset class to be traded with the broker and the client. The matrix includes: commission rates (in an agency model), promptness of execution, settlement and clearance capabilities, willingness to commit capital, quality of research, creditworthiness and reputation. Certain legal agreements have to be in place before execution occurs, such as ISDA master agreements for derivatives, CDEA for clearing transactions, and GMRA for repo trades. With a broker agreement database, the OEMS provides traders a real-time dashboard of all eligible brokers for a given trade, with a specific group of client accounts on the order. Traders can perform RFQ, trade time analytics and final execution all within a few clicks.

Execution Analysis is a more suitable tool than transaction cost analysis (TCA) for fixed income markets. Traditional equity TCA provides only historical views. In contrast, a fixed income OEMS delivers a real-time view of current market conditions. It starts with a price snap of broker bid and ask as an order arrives at the trader's book; records broker price when the trader receives a quote, executes a quote, or receives a fill from an electronic trading venue; and ends with a series of reference price data points across the entire trading process. According to predefined calculation methods, the system will indicate outliers of broker price to signal market movement. This helps gauge the effectiveness of trading strategies against different benchmarks, such as volume weighted average price (VWAP). Since commissions are not always charged directly to buy-side clients in fixed income markets, it is important to understand embedded dealer/venue mark-ups, in order to calculate historical "clean" prices. Using a built-in commissions and fees engine, clients are able to reveal the "hidden" cost from the actual payment to drill into the details within the OEMS.

Buy-side firms need to review trading results, monitor their broker rankings and execution qualities, and evaluate their best execution policy on a regular basis. A historical execution view tied to current working orders enables traders to find execution patterns, discover trends, and set up a benchmark for new transactions. The OEMS also takes the buy-side firm internal broker ratings and historical quote hit rate into consideration. With the help of firm-wide historical quote and trade records, a wide range of data can be collected and qualitative monitoring can be performed by operations and compliance teams. This also includes position level risk measurement, commission and fee assessment, and collateral requirements.

The next-generation OEMS has become an integral part of the buy-side execution process, so much so that firms now include its usage as part of their specific policies. The OEMS also helps buy-side firms meet ever-evolving regulatory requirements, and provides their investors and clients with timely and accurate execution track records.

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