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"The robots are coming" is a common refrain – first it was the robo-advisors, and now AI has entered the chat (pun intended). But for traders, the robots have been around for a while, and they're providing benefits rather than the drawbacks.

We're talking about algo trading, a well-known strategic piece of the puzzle for asset management and hedge fund markets. For wealth management, though, algo trading is a next-generation strategy that provides benefits like hiding large orders to achieve better pricing without moving the market.

In this article, we'll explore the ins and outs of algorithmic trading, including how order management systems and trading APIs are involved, with the three key advantages of adopting algo trading into your firm's processes.

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What is Algorithmic Trading?

Simply put, algorithmic trading is [trading controlled by code](#). The rules pertaining to that code are input by humans, and then left to function on their own – without being controlled by manual clicks and keystrokes each day.

Traditionally, algorithmic trading was primarily implemented by large institutions (like investment banks, hedge funds and institutional asset managers) that are entering or exiting positions that will have market impact, such as substantial positions or thinly traded stocks, such as small cap companies.

However, its use case today has greatly expanded thanks to both technological advancements in and democratization of trading software. As the investment management space becomes increasingly complex and client demands continue to rise, algo trading is finding its place in all types of asset and wealth management firms.

How Does Algo Trading Work?

In [an algo trading process](#), a human trader doesn't need to constantly monitor prices, depth of book, or even be the one to manually split large orders into smaller orders. Instead, there are several ways for firms to implement algo trading and leverage computational models to follow directions for all of these situations. Like any rules-based systems, trades are enacted when certain criteria are met.

That may sound complicated – especially to those of us who lack substantial coding knowledge – but it actually simplifies the trading process. In some firms, a computer programmer may code the directions for the trading model. From there, the program automatically monitors markets and prices based on the parameters given. When a trigger is tripped, the orders are executed.

In other situations, buy-side firms may access broker algorithms through a trading software provider, like Flyer's Co-Pilot, who makes broker algos available depending on which algos a broker makes available to the client.

Common Algorithmic Trading Models

Targeted Market on Close

This algorithm attempts to execute as many orders of shares as close to the market's closing time as possible, which can minimize price impact. It delivers an efficient way to executive a significant number of traders while mitigating market disruption and attaining favored closing prices.

Implementation Shortfall
When an Implementation Shortfall algorithm is used, the strategy attempts to minimize cost by trading off the real-time market, resulting in a difference between the decision price and execution price. It offers a systematic approach to optimizing the trade-off between urgency of placing orders and price impacts.

Dark Sweep
This algorithm scans dark pools and other non-lite liquidity pools to discover available liquidity without revealing trade intentions, so trades can be executed discreetly and minimize impact on the market. A dark sweep provides enhanced privacy and greater liquidity access, ultimately aiming to achieve better execution prices for large orders.

Liquidity Seeking
A liquidity seeking algorithm dynamically searches across various markets, including dark pools and hidden liquidity, to minimize market impact while accessing the deepest pool of liquidity. It provides a systematic way to source liquidity and reduce execution costs.

VWAP
VWAP means "volume-weighted average price." When used to determine pricing, VWAP looks at price data for an asset across multiple environments and then weights each according to the volume being traded at each. A volume-weighted strategy helps to achieve prices closely aligned with market averages.

TWAP
TWAP means "time-weighted average price." Using simple math, an asset price can be determined over a set period of time by taking the price at various points and finding the average. This algorithm is beneficial because it can reduce market impact by distributing orders over a specific time period.

POV
The PoV algorithm refers to "Percent of Volume." As the name suggests, this algorithm attempts to execute orders based on the volume of trades happening in the overall market.

When an asset is trading at a higher volume, the order will execute more of those trades—vs when volume is lower, fewer trades are executed to maintain balance with the market.

The Advantages of Algorithmic Trading

1. Faster decisions

The main benefit of algo trading is higher efficiency – once you set your specific rules for the program, it runs virtually hands-free. Plus, you don't have to worry about missing an opportunity or price; the algorithm processes all data available and does the heavy lifting for you.

2. Immediate trade execution

As long as your technology has access to a stable and strong internet connection, you can expect immediate trade execution – no human intervention required.

Of course, automed and instantaneous trade execution is not *always* going to produce a desired result. The [flash crash of May 2010](#), which occurred in part due to algo trading, is just one such example.

Since then, however, [circuit breakers](#) (which are thresholds for the amount of daily trades) have been put in place to prevent further "flash crash" scenarios triggered by a run of automated trades.

3. Fewer opportunities for human error

Since algo trading for financial advisors relies on computer code rather than manual processes, your firm is able to eliminate overreliance on human monitoring – thus reducing opportunities for human error.

As humans, we're more than capable of making simple errors that have larger consequences: Information can be mis-typed. Market signals can be missed.

Related: [How Outsourced Trading Creates a Better Advisor Experience](#)

With an algorithm-based process, those concerns are minimized, while traders can enjoy more free time for other high-priority activities, such as evaluating profitability and other strategic tasks, that would otherwise be spent monitoring prices.

Making the change to algo trading can provide plenty of benefits for wealth managers and trading desks – including higher efficiency and less human error in the long-term. But you need to have the right trading APIs, and order management system, in place to handle the required needs of a complex process.

Explore Algo Trading with Flyer

If you want to use algo trading, you need an automated trading system that allows you to use your code. Get started with Flyer OMS – a fully functional, totally customizable trading system for even the most demanding and sophisticated trade desks.