

Headline: Why algo trading is vital for an efficient capital market	
Source: India TodayNE	Date: 18 June, 2025

Why algo trading is vital for an efficient capital market

India's capital market regulator recently came out with a new set of rules for algorithmic trading in the country to improve compliance and protect retail investors. These clear regulations will only make the algo trading ecosystem robust, supporting its widespread and responsible adoption.



India TodayNE

Jun 18, 2025 | Updated Jun 18, 2025, 8:47 AM IST

India's capital market regulator recently came out with a new set of rules for algorithmic trading in the country to improve compliance and protect retail investors. These clear regulations will only make the algo trading ecosystem robust, supporting its widespread and responsible adoption.

Algo trading is essentially pre-defined programming that automates trades based on a particular strategy or a set of instructions. And it's not new. More than half of the volumes on the National Stock Exchange are contributed by algo or automated trading, according to India's largest bourse's website.

The evolution of algo trading mirrors the rise of digital market infrastructure over the past two decades. Buying and selling of stocks and derivatives has evolved from the trading pits of the past century, where traders animatedly signalled orders amid a din, to a few swipes on the mobile phone. This has been possible with electronic trading, increasing investor trust through constructive initiatives by regulators and lowering costs.

Algo trading, where orders are executed in microseconds and even nanoseconds, only took it further. While it began in the late 1980s in some of the global markets, Sebi allowed 'direct market access' in April 2008.

It has been dominated by large institutions and broking firms, but retail participation has increased as the overall number of unique stock market investors has surged to more than 11 crore. And there were concerns about how investors were using access to algo trading or what new strategies they were deploying through unregulated platforms, increasing the risk of manipulation.

That is what may have prompted the regulator to strengthen its algo-trading framework for

retail participants. The new guidelines provide a framework for algo trading by retail traders and investors. While the strategies, involving less than 10 orders per second, that are created by retail clients using broker APIs (API is a set of functions and procedures to create software applications) are exempted from registering with the exchange, all other algo strategies need prior registration. The regulator and exchanges have also provided clear guidelines for white box (where logic is transparent) and black-box algos (where logic is not disclosed).

All algo providers need to be empanelled with the exchanges and those providing black-box algos need to have a research analyst licence. Sebi has also asked for security measures such as kill switches and two-factor authentication. One of the important measures included in the new guidelines is that brokers are responsible for compliance and algo providers are considered as agents of the broker. According to the circular, the new rules are effective August 1, 2025.

These regulations provide a transparent framework for retail participation in algo trading and will contribute to building a strong foundation to fast-track the adoption of technology and quantitative methods in our markets. Also, the advent of cloud infrastructure, coupled with the rise of AI, is generating interest among retail investors. Anyone skilled in a programming language (such as Python) and having mathematical skills, and the knowledge and experience of trading in markets can do it.

Still, there is a lack of understanding about basic concepts of algo trading like HFT or high-frequency trading where large volumes of orders are placed in microseconds to benefit from the gap in the buy and sell prices. Or, for that matter, co-location—no, it's not manipulation, but a legitimate service that allows traders to place their servers close to that

of an exchange to reduce time lag in data.

Algorithmic trading offers opportunities for testing the trading ideas using statistical tools and reduces the impact of human emotions and errors. It also makes the market more efficient and liquid. But it has also created a need for filling the education gaps and algorithmic trading software, tools, and platforms to access algo trading.

That's where platforms like Quantinsti, which not only offer learning resources to its participants globally but also provide turnkey technology solutions to the brokers to enable them offer their own algo platforms, can help. India not only needs a vibrant ecosystem of developers and traders, but also innovation hubs and developer tools for grassroots growth of algo trading.

By: Nitesh Khandelwal, Co-founder and director, QuantInsti