

Headline: [Algorithmic trading to gain significant ground in 2019](#)

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Algorithmic trading to gain significant ground in 2019: QuantInsti CEO Nitesh Khandelwal

By [Nitesh Khandelwal](#) - December 26, 2018 10:41 pm



Nitesh Khandelwal, CEO and Co-Founder, QuantInsti. (Photo: File)

80% of daily trading volumes in the U.S.A is done by machines, says a [CNBC](#) report. Unbelievable? It's a fact. This is the reality of trading today. How? Algorithms.

What is **Algorithmic Trading**?

Algorithmic trading – trading using algorithms – has been on the rise from the past decade, consistently growing, and has bristled ahead to even contribute to a majority of the trading that happens today. This 80% figure is proof of how vital it is to shape the present and future of trading.

We all picturise traders in the trader's sanctum – a stock exchange – shouting numbers, preaching the holy trading gospel of 'Buy and Sell'. If not that, what is it?

Think of it as a huge silent room seating few traders armed with multiple monitors, custom software and some top-notch algorithms. Huge air-conditioned server rooms embrace the atmosphere with silent whirrs. This handful of crowd trades for millions and billions – every second.

Why are individuals not going Algo?

The latest report by *JP Morgan* says that key trading decisions are being controlled by Algorithms with clients setting only a few parameters. But then, why isn't **Algo Trading** spreading quickly amongst retail participants? A lack of knowledge of the domain, in general, about data, skills and computing access held back a potential lot of Algo Traders. But no more.

Market Data – As the Algorithmic trading practise flourishes, there is an increase in demand for more market data. This not only helps one understand, study, and interpret the historical data, but also helps derive remarkable conclusions. This has led to some aggressive pricing which is quite a bargain for those searching for it. To gain an edge, Market Data providers today are adapting evolving technologies like AI, ML, etc. as well.

Skills – Skills for algorithmic trading and quantitative trading are quite in demand these days with people opting for online courses to cater to their need to learn, develop or evolve their skills. Short courses, diplomas and even degree programmes by renowned institutes have popped up recently.

Computing Access & Cost – There are quite a number of players that have sprouted in the hardware and technological domain the likes of AWS, **Microsoft**, IBM, etc. and many emerging startups like Rackspace and Joyent. Thanks to these **cloud computing services** providers, and plans, traders have access to high computing power at very competitive prices. One doesn't even need to buy servers – they can be simply rented based on your usage. Energy efficient low-cost and low-maintenance systems are finding their way to a larger consumer base.

Algorithmic Trading evolving to the next level

When it comes to technology, it continues to flourish in leaps and bounds.

- Cloud services continue to revolutionize Algorithmic and Automated Trading
- The potential opportunities opened by blockchain technology,
- Evolution of Artificial Intelligence (AI) and easy availability of various Machine Learning (ML) packages in financial markets for individual & retail traders/investors,
- More publicly available/open source research in the domain of Sentiment Analysis, NLP, etc. which can help individual traders significantly

It is just remarkable what kind of a future are we headed towards.

Tailor-made, customized and future-ready

According to monthly reports shared by Indian exchanges, the total volume percentage of the cash and derivatives market traded through algorithms in India has increased to nearly 50% in 9 years from less than 10% in 2009.

Professionals from the world of trading have different needs when compared to that of a student, or a new trader, or an experienced trader. Early traders used to be in search of good markets and shares to invest and trade in while the modern day trader pursues the alpha that continues to elude them. In this quest for alpha, they are persistently searching and learning.

Some pretty advanced mathematical models govern the numerous rapid trading decisions.

And when it comes to the rush towards profits and escaping losses, Quantitative learning, statistical modelling, data analysis, have percolated to the core of trading. While there are a number of tools that are available to the retail & individual traders/researchers in US markets, India has also seen free tools available to the masses focused purely on Quantitative & Systematic Trading.

Coming Soon: A fleet of Algo Traders



The Changing Algorithmic Trading Ecosystem In 2019. (Photo: Agency)

Various companies are entering this domain. A growing need for Quants equals the demand for knowledge and skilled individuals.

When placing traders, students, even people in their 40s at prestigious firms for some very key positions, we have realised that availability of mentors, who are experts from this field makes a lot of difference.

Algorithmic Trading: Within your reach

The internet or even the world for that matter is replete with a multitude of courses, online videos, free tutorials and what not. But why is it that people are never satisfied? We all feel a lack when we lose the human touch.

People often prefer learning at their own pace, through their means, and appreciate support and guidance – as it helps them learn quickly and in a better manner. They often opt for enrolling for self-learning courses. There are also those who prefer a more traditional and robust approach to a classroom learning experience along with these features, job placements, etc. and go for the EPAT programme.

There aren't many reliable resources that will help traders and trading professionals backtest their trading strategies with ease, or provide them with freely available ready-made trading strategy templates.

Career Boost: One step up, One step at a time!

The world deserves to learn – from blogs, articles, books, sessions, webinars. I have personally spent time with MFE, MBA, B.Tech and Finance students from some of the most reputed universities and institutions in South & South-East Asia when we conducted sessions and workshops on Algo Trading for them. They want to learn about it, they want to make a career from it.

If you're from the industry, it shouldn't surprise you that we have conducted corporate training workshops for firms, exchanges, brokers and many more. You might wonder – why? We believe in spreading knowledge of Algo Trading and making them aware of what it has to offer, that they might be missing out on.

When we had started off, I remember us facing such queries ourselves and people wanted jobs. Now, individuals are moving towards starting their own Algo Trading Desks.

Algorithmic Trading: Beyond 2019

If news reports are to be believed, Barclays has gained a 30% year-on-year increase after investing in electronic trading. Goldman Sachs, Credit Suisse and other reputed firms are racing to get their share of the market.

The world is huge, the potential is more, but the resources for this lucrative domain are not fully realised. Thanks to the increasing awareness among people and the desire to evolve their trading practices, 2019 promises even more users rooting for it.

The author is CEO and Co-Founder of [QuantInsti](#), an algorithmic trading institute.