


Headline: [Future of Trading](#)

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# Future of Trading

Valued at US\$ 9,297.2 million in 2017, the global algorithmic trading market is projected to reach US\$ 21,685.5 million by 2026



Given the speed at which transactions take place, algorithmic trading increases liquidity. For securities exchanges to stay competitive and really improve trade, they have to continuously innovate and improve the trading technology implemented. The same becomes quite relevant in our country, where Algo-trade is soon catching up.

On December 30, 2016, NYMEX said bid adieu to its trading pits, one of the last surviving ones in the world. While it constituted just 0.3% of the volumes happening on the exchange, it had a strong symbolic significance as it marked the end of an era that started way back in the 19th century. The transition to Electronic Trading from the Open Outcry in the Trading Pits was complete.

The next big wave that hit the financial markets was the introduction of Algorithmic Trading in the 1980s. Conducive trading environment, revolutionary innovations, and regulations have helped to trade to evolve continually. Today, more than 80% of the traded volume on some of the biggest global exchanges happens through Algorithmic Trading.

SEBI allowed the transition to begin in India exactly eleven years ago, on April 2008 by allowing Direct Market Access (DMA) on Indian exchanges that enabled Algorithmic Trading in the Indian financial markets. The transition to the new regime was quick with algorithmic trading now already constituting nearly 50% of the traded volume in the F&O segment and about 35% in the cash segment in top Indian exchanges. Algorithms are the present 'personality' of Trading as we know it. And with newer technologies coming in, they are continually being improved using the software, mathematical and quantitative techniques.

Given the current state of affairs in trading, the natural question is what next does this evolution has in the offering? The answer lies in the rise of data science, technology & computing power that started coming to the mainstream since the last decade. A recent report by Bloomberg says that the market has ushered in a "Quant" Era where everyone is competing to get those necessary skills and be future-ready. While another one says that Morgan Stanley and UBS have joined hands to promote and develop machines focused on trading bonds and currency pairs rather than just stocks.

If these recent reports and certain predictions are to be believed, the future could very well be Quant-driven. According to a 2018 report, 37% of financial institutions in India invested in AI technologies and 68% are planning to adopt it. While some have readily accepted the markets as they are, some are trying to make trading much more secure and better for balancing the markets. Regulations and laws are being carefully crafted by regulatory agencies, trading exchanges and even governments globally to create foolproof systems and ensure compliance.

A part of Algorithmic Trading, but NOT the only part as is often misunderstood, is High-Frequency Trading (HFT). While HFT trading enables an efficient market for the market participants & reduced transaction cost for retail investors through the lower bid-ask spread, it also needs costly infrastructure for faster market access like exchange colocation and faster connectivity. The fibre optic cables, which were amongst the fastest medium to relay the data are now being replaced by Microwave links. The laser networks, which provide even faster access, are also becoming reality in certain markets. So, HFT infrastructure would not seem to



get cheaper anytime soon.

On the other hand, for another type of quantitative & algorithmic trading strategies, it seems that is not going to be a monopoly of the large institutions as retail & individual investors are starting to get affordable access to better analytical tools & computing power, thanks to this era of cloud computing and the open-source

movement. But yes, they would certainly need the new world skills related to statistical analysis and programming in addition to the financial markets acumen. Within programming languages, Python has now become the most used programming language in the industry. In fact, now even the top banks are getting their employees to learn Python Programming given the industry requirements in this era.

On the workforce side, there would be the need for skilled, knowledgeable and technologically enabled individuals who stay aligned with the changing face of trading. Just like the continuous evolution of trading, the skills sets also need to continuously evolve. The higher relevance of technology, quantitative methodologies and mathematics require people having expertise in them.

In 2017, the global algorithmic trading market was valued at US\$ 9,297.2 Mn and by 2026, it is projected to reach US\$ 21,685.5 Mn. Recent industry research suggested that Algorithmic Trading is expected to grow at CAGR of 10.1% in terms of revenue across the globe.

Financial markets have always caught the fancy of best of the brains, thanks to the challenging domain it has always been. The future might become more challenging for the incumbents if they don't evolve themselves and cater to the new realities. It would also be an opportunity for the new type of market participants & fresh talent. There is an almost sure chance that more markets and the market players would be going algorithm.

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