

Headline: [Power of technology to shape future of trading](#)

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Power of technology to shape future of trading

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Mumbai (Maharashtra) [India], Nov 7 (ANI-BusinessWire India): The financial world has seen a drastic change in the way organisations work. A casual check on the number of job listings for quantitative traders in leading investment banks depicts a steep rise in the demand for trained workforce with a new set of extremely sophisticated modern-day skillsets. Professionals endowed with the traditional set of skills are discovering that they will have to quickly learn a new set of skills to stay relevant and competitive. For example, Goldman Sachs has replaced 600 traditional traders with just two technology enabled traders in their equity desk.

This is just one example of major Wall Street firms adopting computerized trading. Broadly speaking, trading can be categorised into five types viz. discretionary, fundamental based, technical, arbitrage and Market Making. Traders with profitable strategies obviously aim to scale such strategies by leveraging the power of technology. Traders have also invented a new style of trading - which is leveraging the power of technology to trade at short lived opportunities, or to use technology to respond quickly to events. This new style is known as high frequency trading.

"When I returned to India and I was talking to market participants, I realised that while most firms were very keen to embrace algorithmic trading in a big way, but most of them were very clueless about the way to go about doing it. The biggest challenge started from the fact that the existing workforces were either finance professionals or technology professionals. To excel in algorithmic trading they required professionals who could understand technology and finance equally well - and the way to leverage one in the other," said Rajib Ranjan Borah who is a globally renowned speaker on Options, Derivatives and News Based Trading Research.

Traders who have a profitable trading strategy would want to scale it up as much as possible. The best way to do it would be leveraging the power of technology. Using computers to trade also give traders with broad portfolios the ability to do portfolio and risk management more effectively. Thus traders found a strong need to automate the execution of their strategies. Similarly, in India when regulations on DMA were opened up in 2008, firms, therefore, made a beeline towards implementing the execution of their trading strategies to computer algorithms.

However, despite their strong interest, they found it difficult to recruit professionals with relevant skillsets as these were new skills that not many professionals could offer. Traditionally traders and technology professionals were different people - with the advent of algorithmic trading, it became imperative to find professionals who could understand technology and finance equally well."

Validation of the fact that machines are ruling the scenario lies in the observed facts and figures, be it for trading in stocks, derivatives, Forex or commodities. The last decade saw exponential growth in the algorithmic trading market and it continues to grow at a significant pace.

According to the "Global Algorithmic Trading Market 2016-2020" report published by Research and Markets last year, the global algorithmic trading market is expected to grow at a CAGR of 10.3 percent during the period 2016-2020. Trading firms worldwide have adopted algorithmic trading in a big way. In order to remain competitive and earn big profits year after year, big banks, hedge funds, and other trading firms have been hiring top talent from various universities and colleges worldwide.

This, in turn, has led to a surge in algorithmic trading/HFT jobs. Scores of students, engineering graduates, and developers want to explore and build a promising career in algorithmic trading today. This said, many aspiring quants and developers are unaware of the nature of the work in algorithmic trading firms and the skill sets needed to make a foray into this coveted algorithmic trading world.

"Trading has always been at forefront of adopting cutting-edge technology, especially in the short term trading domain. The trading floor of yesterday has been constantly replaced with sophisticated trading models managed by few people with key skills. The landscape of trading technology has changed significantly within last couple of years and with the advent of machine learning, reliability on machine to make critical decisions has taken a significant leap. And it is quite evident from the key skill required by the big hedge funds. We need to upgrade our skill set to take on the new era of machine trading," said Sameer Kumar, Vice President-Technology at iRage Broking Services LLP.

One thing that is common for all those Quants mentioned above is their enrolment for EPAT (Executive Program in Algorithmic Trading) which is a six month long course offered by QuantInsti. The course is conducted by industry experts like Dr. E P Chan, Rajib Ranjan Borah, Dr Yves J. Hilpisch and many other industry practitioners. Dr Chan is the Managing Member of the QTS Capital Management LLC., a commodity pool operator and trading advisor. He has authored three books so far.

His first book on 'Quantitative Trading' caters to beginners while his second book 'Algorithmic Trading: Winning Strategies and Their Rationale' is an in-depth study of two types of strategies: mean reverting and momentum. Machine Trading, the third book which delves on Deploying Computer Algorithms to Conquer the Markets covers a variety of advanced quantitative trading and investment techniques from state space models to machine learning, applicable to a variety of instruments from ETF's to options.

The traditional models of trading require additional time, money, assistance and information. Comparatively, the modern way of trading is much more cost-effective and quick. Traditional trading requires an additional cost of brokerage and advisory which is not applicable for modern trading mechanisms. The changing scenario brings with itself a drastic shift in the existing job opportunities. (ANI-BusinessWire India)