

Algorithms Get Smarter By Markets Media Holdings

Blinding speed and low latency are giving way to instrumentation and fine-tuning as the objective of algorithm users.

"Speed is changing from being a competitive edge to being a requirement of the trading platform," said Hazem Dawani, chief executive of OptionsCity, provider of the Freeway platform. "The trend is to build intelligent trading strategies that use predictive analytics."

Freeway Analytics "provides the ability to create new algos, to backtest and deploy them into production quickly, and iterate through your intellectual property, rather than just having a simple idea and trying to be faster," he said. "Being able to iterate through ideas and create algorithms that talk to other algorithms that can adapt to market conditions is becoming more of a need in the market."

Freeway was designed to create more than traditional trading algorithms, that not only can do trade execution, but also provide continuous reporting of environmental factors and triggers.

"Customers can use products like Freeway to continuously monitor a variety of conditions and gather data to later analyze which strategies work best at which times," said Andrew Lisy, algo product manager at OptionsCity. "We see larger firms that are interested in these sorts of metrics, as they care not only about what is working, but what has worked before, and what may work in the future. Data gathering capabilities through systems like Freeway enable this."

Combining business intelligence with trading execution is only one piece of the puzzle. "The real power comes once you understand the trader's workflow, how they want to interact with the market, their trading objectives, and how that manifests itself from a user experience perspective," said Josh Schubkegel, chief technology officer at REDI. "We believe the game-changer is making that workflow as seamless and intuitive as possible."

Schubkegel uses the analogy of taking the trader's experience from flying an old single-prop airplane, where everything is manual, to flying a modern day jet that is largely automated.

"The modern pilot is monitoring a data-rich dashboard and can take manual control when necessary, which is the direction we are taking with REDI," he said. "It is important to have insight into what can be automated as well as what

shouldn't be, and making that balance as frictionless as possible for the end user so he or she can quickly adapt to changing market and business demands."

While OMS and EMS platforms have been adding new features and functionality over the past few years, these don't necessarily equate to actual innovation or an improvement in user experience. In fact, in many cases, it can complicate things further. "Bringing to bear new types and sources of data, as REDI and some of its peers are doing, is critically important, but again, this needs to be done with the entire user experience in mind," said Schubkegel.

A smart or learning EMS can take advantage of data that you've gathered before, and can use machine learning to figure out which combination of inputs for a given environment worked best, and then do different permutations of those inputs to find a better execution.

"We see more and more users and algo developers creating "algos for algos" -- basically taking advantage of the fact that different strategies work best in different environments," said Lisy of OptionsCity. "Once you have data about when a given trade "works", you can do things like bake those results into an algo that chooses which strategy to run."