

## Analysis

# Data Auditing: Finding the Needle in a Haystack

Author: [Anthony Malakian](#)

Source: [Buy-Side Technology](#) | 13 Sep 2013

As auditing demands increase, so does the need for storage solutions that can quickly retrieve trade data from exact moments in time.

Raj Mahajan, CEO of Allston Trading, faced a vexing scenario: Regulators increasingly expect firms to be able to explain what traders were thinking at specific times. Such is the state of auditing. For example, "What were you thinking at 12:15 and 22 seconds when you put that order into the marketplace?"



It's a multi-dimensional problem, says Mahajan, who spoke on a panel at Inside Market Data Chicago this week. One has to be able to look at the data and not only understand what was happening in that market at that specific time, but at other times, as well. Sometimes, how you trade Apple is determined by what happened in the futures market, he explains.

Because of these new regulatory auditing requirements, Mahajan says there is an opportunity for enterprising vendors to provide services for recording data, finding data and then delivering it in an on-demand fashion, most likely as-a-service or in the cloud.

"You have to have all this data, and this mosaic to piece together in terms of your intent at that moment," Mahajan says. "So, many firms have to cope with how to, on demand, derive and find the data that generated the impulse for putting that order in the market, just to meet compliance regulations. And I think that creates an interesting question: Do you have to have recorded all of that data to be able to go back and determine that? If there are solutions to help with that, I think that could be valuable. It's a big area of interest."

This problem is exacerbated for firms that employ a hybrid trading solution that includes both black box and gray box trading.

"If all your strategies are 100 percent black box then inevitably there is a data event that stimulated the action that was taken," he says. "But for a lot of firms in Chicago, they're more hybrid where there's some gray-box trading on top of algorithms and that's where it gets trickier because you may have just been looking at a chart and you don't have the data necessary time-stamped at that increment to go back and audit, and that's a service that could be valuable."

This analysis led to a question from a Chicago-based trader who was in attendance at the Inside Market Data event: Data can give you the environment that existed when the trade was made, but the decision is more often than not based on a person's experience or intuition. How can technology provide analysis of a human reaction?

The answer is not black and white.

"Depends on the strategy," Mahajan says. "There are certain strategies where you turn it on in the morning and you go for a walk around the park and come back and see what happened. Then there are other strategies where you have a human being who is aided by technology, but not substituted by technology. So it's not always easy to determine what exactly was the synapse that fired that drove that decision at that moment."

Stephane Dubois, Xignite founder and CEO, says most of the top-tier, larger firms have the ability to store, collect and manage compliance data. "So they always have this data available at all times," he says.

As a result, smaller firms are turning to third-party vendors, and to the cloud, for storage. "What we're seeing is that for smaller firms and emerging players, there's increased acceptance for using a third-party hosted solution for being able to store and access historical trade quote information," Dubois says.

### **Bottom Line**

While Mahajan was expressing his frustration at not being able to find solutions to piece together historical positions for auditing purposes, there were many nodding heads in the audience showing silent signs of solidarity.

Clearly, smaller firms do not want the hassle of these data requirements, as was noted in a [previous article](#) stemming from an Inside Market Data Chicago panel. But you have to wonder how much firms are going to want to hand over their trade data to a third party and have that information stored on the cloud.