

## How Nishalba ScanPro Helps River City Capital Minimize Headcount and Improve Performance

When Mark Schwitz founded hedge fund River City Capital in 2004, keeping a tight rein on both headcount and overall expenses was always in the back of his mind. “Everyone likes hiring and spending money when times are good. It’s pretty easy to do. What isn’t easy is the cost-cutting that has to happen when a Bear market comes along. The worst is having to let good people go who haven’t done anything wrong” Schwitz explains.

“Keeping your staff size modest and not buying the best of everything is a real challenge. This is a ‘feast or famine’ business, and the trick is pushing away from the table when you’ve had enough and not gorging yourself” Schwitz says.

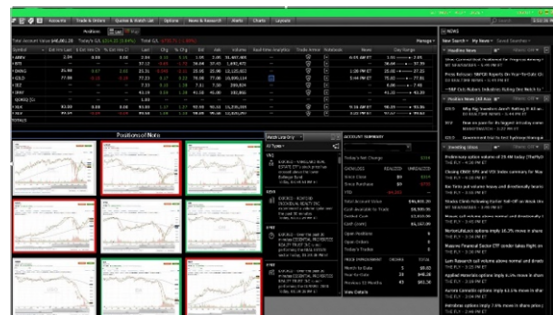
Things went well right from the start, and Assets Under Management grew from \$1.5 Billion at the beginning to \$2.5 Billion after the 2<sup>nd</sup> year and had reached \$4 Billion by the middle of 2008. Like most companies in Investment Management, the next 2 years were very rough as AUM fell by 1/3 and headcount fell by half to just 15 employees. River City Capital was spared the extremes some of its competitors suffered through due to its more conservative approach that used less leverage than most.

Schwitz and River City were also fortunate to have started paring back their riskier bets before the Lehman Brothers collapse and made extensive use of options to minimize downside risk on their bigger positions. Although the fund stayed afloat, Mark was determined to be a better risk manager going forward and make better use of technical analysis to see the warning signs on his computer screen that his “gut” saw in ’08.

### Product Design as Effective as it is Intuitive

During his visit to a risk management conference in London, Schwitz stopped by Nishalba’s booth between sessions and was struck by the deceptively simple yet effective way ScanPro does its work. The dashboard’s ability to flash icons to signal an important event on a chart was so naturally intuitive that Mark Schwitz knew he had to try a copy for himself.

After installing it on his personal workstation to give it a test drive, Schwitz was struck by how easy ScanPro was to configure for the strategic events he wanted to track. When he input some of the trading rules and patterns his traders used, the flashing red “sell” signals and green “buy” signals started visually jumping off the screen when applied to some of the fund’s positions.



Within a day or two, traders were seen standing in the door to his office watching the light show of reds and greens dancing on the screen he set up to monitor one of the equity portfolios. “The most common question was ‘what the heck is that?,’ followed shortly after by ‘how can I get that on my machine?’” Schwitz remembers, smiling.

After the app was installed on one of the trader’s Bloomberg terminal and a few trading rules were configured to test it, ScanPro didn’t take long to start winning fans and earn its place as a trading tool for the Equities portfolios.

## **A Financial Bird Dog That Picks Out Opportunities**

As the proprietary algorithms scan the real-time charts for each position in a portfolio, it recognizes when a security’s price crosses a trend line or leaves a price channel. If the chart pattern represents a “buy” opportunity, a green frame highlights around the chart. It works the same way when a “sell” opportunity is found, and the frame is then highlighted in red. If the security is in a trading range that suggests no change, the frame stays a neutral gray. The value of this constant scanning increases as the number of positions in a portfolio grows and it gets harder to watch each chart’s price move throughout the day.

The software never blinks, gets distracted, or takes time to think about what it’s doing after work today. It looks for events on a chart that indicate a likely Buy or Sell decision on a security. Nothing more.

If you can visualize the way a good bird dog finds its target and locks into position to alert the hunter, you understand what ScanPro does for traders. The trader plugs in the patterns to be searched for, and the software scans until it finds them. When it does, it marks the likely trade. The trader confirms the trading opportunity and then pulls or does not pull the trigger on the trade. It’s that simple as that, but this vigilance pays dividends with increased use.

## **A Valuable Tool That Improves Morale**

As River City’s AUM grew back to its pre-2008 level and beyond to exceed \$6 Billion by 2012, the Equity portfolios were growing large enough to make hiring additional traders to manage them a strong consideration.

While a nice problem to have for a hedge fund, the growing size and complexity of the portfolios had consequences for Schwitz that would have to be solved, and quickly. The stress levels on traders and the funds’ staff in general was growing and the need to hire started to look unavoidable. “I’m big on helping my people to be as productive as they can be” Schwitz explained, “and ScanPro bought us at least 2 years before we had to hire more staff to add the in-house commodities and FOREX portfolios our clients were asking for.”

“My traders were like kids with a cool new toy when they started using ScanPro for live trading. They said it makes it easier to do their jobs better, and what boss wouldn’t be interested in something that did that?” Schwitz said confidently. “My father-in-law is a building contractor and when I told him about

it, he said it reminded him of the time when he bought his framing crew pneumatic nail guns to replace their hammers on the job site” Schwitz explained.

“They ended their days less tired and got more work done. Sure it cost a few bucks to start, but he had less turnover after that and it helped morale because the guys started believing he cared about them more than just hearing it said once in a while” he said. “When you consider how much more the efforts of my traders are worth than that of construction workers, I’d have been crazy to not at least try a tool that could do what ScanPro is doing for us” Schwitz explained.

## **The Future: Wicked Queens and Artificial Intelligence**

With the ever-increasing pace at which servers in datacenters grow faster and the software algorithms running on them grow more sophisticated, the capabilities they enable can start to sound like something from a science fiction novel. Nishalba and its ScanPro platform are no exception to this, and new modules likely to soon work their way into traders’ hearts are the idea generator Magic Mirror and an Artificial Intelligence trading capability known as HAL Mode.

### **Magic Mirror**

One of the realities of the investment management business is the continual need to look for new investment ideas. Some enjoy the process, but most know that it’s a part of the job that has to be done well if they are to succeed. Nishalba’s new companion product to ScanPro is called Magic Mirror, and it was inspired by the Wicked Queen in Snow White. The queen would ask the mirror who was the fairest of them all, and the mirror flattered the queen by saying it was her.

Nishalba’s Magic Mirror searches all securities of a requested type (e.g. US equities, foreign equities, various market cap. sizes within those classes) for particular chart patterns that suggest a good time to buy or short the security. While it can be run during the day for users with real-time data access, most will start the scan to run when they leave the office and be done when they arrive at their desk in the morning.

Imagine, as an analyst or trader looking for actionable ideas, seeing a list of stocks nearing or at “buy” points and all that is needed is to do is confirm whether or not you agree they make sense to add to a portfolio. The time saving would be huge and knowing that it scans every security of a certain type on a given exchange means you don’t miss many, if any, opportunities.

Most people will still want to check into the security further with their other research tools on the Bloomberg terminal, Morningstar, or whichever ones they trust to give the balance sheet and other particulars about the company a good “once over.” That’s normal, and probably advisable for serious investors. However, knowing that only a few stocks matching your criteria are ready to move takes much of the drudgery out of the process.

## **HAL Mode Voice Control and A.I. Assistance**

Imagine if Siri or Alexa could help make you money in the financial markets. As crazy as that may sound, the technology to make it a reality is just around the corner. The HAL mode module for Nishalba ScanPro does more than just allow voice commands for the software in question. It records the trade recommendations ScanPro generates and what action the trader takes on them for analysis. After the artificial intelligence algorithms have found patterns in the data to suggest which trades were more profitable than others, it offers possible changes to the trading rules and patterns to improve results.

Instead of having to pay an analyst or statistician to perform that research, HAL collects the data in real time and will offer the suggestions whenever requested. Just like a chef sharpening his knives on a regular basis, HAL helps a trader become more profitable over time by noticing details a human might miss.

One thing to remember about HAL mode and artificial intelligence in general: it is a tool to aid a human trader. A machine can never duplicate a great trader's intuition and reflexes to react and adapt to market conditions that change constantly. In the same way that robotic arms allow orthopedic surgeons to perform joint replacements with greater precision and get better results for patients, HAL mode gives traders better "buy" and "sell" signals for more profitable trading.

Currently HAL mode is in final prototype testing and is slated to roll out with a selection of voices to choose from including the original voice of HAL from Space Odyssey, Jarvis from the Iron Man movies, and British actress Elizabeth Hurley for those who prefer a feminine voice. More options are likely as the product nears availability for purchase.