THE TECHNICAL ANALYST AWARDS 2009

Sheraton Park Lane, London W1 - 12 March 2009

Category: CELEBRATING EXCELLENCE IN TECHNICAL ANALYSIS AND AUTOMATED TRADING

Nominee: Trade Ideas LLC's Trade-Ideas Automated Trading Bot (ATB)

Judging Criteria for Best Automated Trading Product

1. Describe your product and explain its functionality, with particular regard to: Range of variables/inputs that can be programmed (e.g. technicals, fundamentals, news); capacity to develop complex models; range of preprogrammed trading strategy templates (e.g. pairs trading); backtesting and optimization analytics; ability to create a portfolio of models; ongoing monitoring of models/portfolios; and trade execution functionality. Outline system architecture of product, programming methodology, user interface, and interoperability with software/data providers and execution venues/exchanges.

The Trade-Ideas Automated Trading Bot consists of 3 components that bring automated trading capabilities to customers: **Trade-Ideas PRO**, a real-time market scanner; **The OddsMaker**, an event-based backtesting tool for modeling position management and trade plan rules; and the **Automated Trading Bot (ATB)**, the tool for controlling automated trading.

Trade-Ideas PRO is an "Event Driven" real-time scanner connected to NYSE, AMEX, NASDAQ,



Figure 1: TI PRO list of predefined, modifiable strategies

OTC/Pink, Bulletin Board, and TSX markets. The scanner watches all trades in real-time and compares this activity to Trade-Ideas' database of historical trade activity using statistical analysis. Users define specific events and are alerted to them in real-time, as they happen.

Trade-Ideas PRO models an infinite variety of events or patterns based on technical and/or fundamental analysis ranging from the simple to the complex. The product comes pre-loaded with a list of



preconfigured strategies (see Figure 1 above). Customers either create their own strategies from scratch or modify the preconfigured strategies to suit their trading style. Users then either scan the entire market for their specific events or narrow their search to a "basket" of stocks or a single stock that exhibits their desired pattern.

A proprietary "mark up" language simplifies strategy fabrication. Users do not program their patterns using simplified or "easy" language. Instead users select which alerts/filters (from an inventory larger than any other competitor and more frequently added) are applicable to their search via a series of check boxes, simple ratios and, where applicable, additional quality parameters to describe their requested pattern.

In addition to giving customers event-driven alerts in real-time, Trade Ideas LLC also provides the ability to backtest trading systems, using alert and filter criteria, with an add-on module called **The OddsMaker**. Much like Trade-Ideas PRO The OddsMaker is an event-driven backtesting tool. Instead of finding an event within the history of a predetermined stock, this backtesting tool indicates if an event contains high or low odds of producing gains across the entire market – given specific, user-defined position management rules such as holding period, time of trade, stop loss/profit target amounts, etc. Changing these parameters affords a trader the optimization abilities to know if a strategy, for example, performs well in the second hour trading, but not in the afternoon (more examples appear in Q#3). The OddsMaker connects to several brokerage execution systems to provide fully automated trading via the ATB.

The Automated Trading Bot uses all the parameters of The OddsMaker plus additional implementation controls to automatically trade the next signal provided by Trade-Ideas PRO, according to the position management rules previously tested by The OddsMaker. The ATB also allows for the execution of multiple strategies at the same time with a real-time summary of the portfolio's P&L. Trade-Ideas PRO and The OddsMaker are integrated tools inside the active trading platforms of Scottrade Inc. and E*TRADE Financial Corp. Automated execution of strategies is available through TD Ameritrade, optionsXpress, Assent LLC, Interactive Brokers, and MB Trading.

The system architecture of Trade Ideas LLC's suite of tools is built on L.A.M.P: Linux, Apache servers, mySQL, and PHP technologies.

2. Summarise how your product is innovative and/or superior to its competitors.

Q#1 mentions many of the superior features of Trade-Ideas PRO, the real-time scanner, to its competitors. Here we answer how our backtesting and automated trading modules are more innovative than our competitors by comparing 3 elements: the determination of which stocks to backtest, the length of the backtest's history, and finally the types of indicators used in backtesting and automation.

Which Stocks to Backtest

Most backtesting systems (e.g., TradeStation, WealthLab Pro, eSignal) will determine an indicator's success against a selected basket or a single stock *a priori*. Not only must the backtested stocks be known ahead of time, but users often test each stock against the indicator and summarize the results independently – a time consuming and ineffective method which usually reduces the number of stocks backtested. The OddsMaker does not ask the trader for the list of stocks to backtest. This input comes from Trade-Ideas PRO and the event modeled in it. The OddsMaker finds the stocks matching the event and applies its backtesting rule-set to generate its report. In this way The OddsMaker is an event-based backtesting tool rather than a stock-based one.



Figure 2: TI PRO with OddsMaker results

Length of Backtest

Many competitors provide backtesting data that reaches as far back as 10 years or more. They often claim this as a differentiating benefit. Is today's market the same as the market in 2003? 2004? We find these questions are confusing to factor into a backtest at best. At worse a trader can fall victim to curve fitting exercises where the data and its results look like anything. All backtesting models rightly place more weight and emphasis on the most recent data. This is the only data The OddsMaker considers in its analysis. Because The OddsMaker focuses largely on the active, intraday trader, the current backtest period includes the last

15 trading days. This time period ensures results are reflective of what is working in the market NOW. See Figure 2 above. Note: Trade Ideas LLC will soon expand the backtest period of The OddsMaker to as many as 6 weeks.

Modeling Indicators and Rules

The OddsMaker assists traders in finding strategies with high statistical probabilities of succeeding given specific position management rules. The backtester already includes the event using the alert and filter indicators within Trade-Ideas PRO. Unlike many competitors, however, The OddsMaker goes beyond these studies and allows for the additional backtesting of position management rules like:

 Time in the trade – Answering, "Does this strategy work if I hold the trade for 20 minutes vs 3 hours?"

- What time during the session trades are made Answering, "Is this strategy's return better if I trade during the first hour vs the last hour of trading?"
- Stop losses, profit targets
- Thresholds for success Answering, "How can I model my commission rates and slippage?"

and other trading rule parameters. See Figure 3 below.

Configure OddsMaker		X
Success Price moves © UP C Down by at least © \$ 0.01 C 0.1 %	Profit Target / Stop Loss Sell if the price moves up \$1 ✓ Sell if the price moves down \$0.4	Other Exit Condition 0 10-5 % trailing stop 0 0.5 bars trailing stop Another alert Configure Image: None None
Entry Time Start 0 hours and 0 End 0 hours and 3	minutes after the open.	Exit Time T
OK Cancel		

Figure 3: OddsMaker configuration

Using Trade-Ideas PRO a trader defines the desired pattern and allows the scanner to survey the entire market in real-time and publish the stock symbol the instant the pattern occurs. If executing manually, the trader sees the symbol scroll across their ticker and decides whether or not to take the trade. If executing automatically, then the trade is executed robotically, according to the position management rules tested in The OddsMaker, and

the appropriate stop loss, profit target, and other details of the trade(s) are handled automatically. Rules can be applied to as many strategies as desired and each can be controlled by the ATB regarding the number of trades to execute, whether or not to add to positions, and many more actions.

3. With regard to your customer base, indicate the extent to which you may have a stronger presence in certain areas or with particular parts of the market, e.g. by asset, geographical region etc. Please provide breakdown by turnover where possible.

Trade Ideas LLC's tools cater to a wide client base. This includes brokerage institutions (e.g., UBS, Merril Lynch, Knight Capital, and CIBC) on the sell-side who use the tool as a means of outreach to notify clients of moves within their portfolios (10% of customers). It also includes traders at proprietary firms like Assent (a division of Sungard) as well as large online retail brokerages like Scottrade Inc. and E*TRADE Financial where Trade-Ideas PRO and The OddsMaker are integrated into their active trading platforms (90%). Finally Trade-Ideas is also used within the Cash Management departments of Treasuries within several Fortune 500 firms (e.g., AllState)(<1%).

Primarily the customer base is the highly coveted active retail traders who trade at either the large retail brokerages or the Direct Access brokers.

4. Provide a brief history of your company and highlight the developmental stages of the product.

Trade Ideas LLC was launched in 2002 with a web-based version of Trade-Ideas PRO (still available). Software development closely resembles the Agile cycle with some elements of spiral development. In 2003 Trade Ideas added the client application Trade-Ideas PRO and in 2007 The OddsMaker and the ATB were added.

5. What is the current status of your development work? Do you have plans to expand, develop or modify the platform in the future?

We are currently bringing new filters and alerts online every month. We will continue to improve our entire system. These improvements range from improved accuracy of alerts to minimizing latency. Visit http://www.trade-ideas.com/WhatsNew.html

- 6. Please provide where possible: user manual; link to online demonstration; current marketing material by post or email.
- <u>www.Trade-Ideas.com</u>
- List of online demos: <u>http://www.trade-ideas.com/VideoHelp/Menu.html</u>
 - Automated Trading Bot with TD AMERITRADE: <u>http://www.trade-</u> ideas.com/VideoHelp/Menu.html?video=Automated%20Trading:%20Trade-Ideas%20Robot%20for%20TD%20Ameritrade:%20Overview
- <u>http://static.trade-ideas.com/Ameritrade/TD_Ameritrade_Robot_User_Guide.doc</u>



"What's your exit strategy?"