

AUTOMATED TRADING WITH FUTURES BETTING.COM

Today's markets pose key challenges to those seeking trading profits. In contrast, markets of 20 years ago held a plethora of trading opportunities, often obtainable from trading just one product or even one stock. So why have things changed so much? Quite simply we have more market participants embracing ever changing technology resulting in a more mature market where opportunities are not so apparent and need to be weeded out and traded with the ultimate precision and efficiency.

We all know that to have a strategy is crucial for successful trading; however the means by which we execute that strategy is of much greater importance. It is fair to say that you can succeed with an average strategy and excellent discipline but not with an excellent strategy and average discipline. So we need to have a plan, but more importantly, an effective means of executing that plan. Discipline, or lack of discipline, is probably the number one reason traders fail to make money and after all, we are human and prone to emotion, which is more often than not the catalyst for poor and irrational trading decisions. The problem is that discipline is not always easily learnt. However there is an overnight solution to adhering to a trading strategy - automated trading.

Automated trading

Automated trading is best described as the identification of strategy criteria, signal generation and execution of that defined strategy, automated.

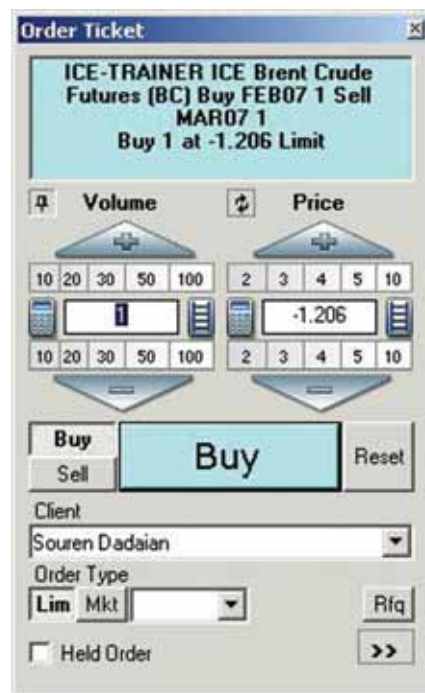
Firstly, define a strategy. If we want to make money, we need to identify an 'edge' which is not being exploited and

saturated by other market participants. The components of a good strategy may be quite straight forward; however what makes it successful is the monitoring and disciplined execution of that strategy. For example, you may have a strategy that waits for three technical indicators to reach certain criteria before entering or exiting a trade. This may seem simple, and good strategies do not have to be complicated, but in

That brings us on to our second key component: Identification. We could spend hours manually scouring charts or fundamental reports looking for instances where our strategy criteria fit. But that is unrealistic, so we need to utilise technology to help us. If we have a predefined strategy and an automated means for searching looking for a criteria fit, then we are half way there. Then we need to trade our signals. Some traders are super disciplined but most are not: Automatic execution sounds like we are just generating a computer to do all the work. Well, to a certain extent we are, but the markets are forever changing and we need to have some flexibility in what we do to accommodate those changes. When a strategy is coded into software which will automatically generate signals for you, the strategy is 'boxed'

Black and white boxes

A 'Black Box' is a term used to describe a 'closed' or 'sealed' trading system. By this we mean, an algorithmic strategy which generates signals in any chosen market but which cannot be changed or adjusted. It is then possible to have the trading signals executed automatically. This is perfect if the black box strategy is a good one and some of the good ones may stay profitable for maybe 5-10 years. But many start out as winners and soon loose their inherent effectiveness and cease to be profitable. There are many websites which are literally a library predefined strategies, submitted by their creators for others to trade with. Collective2 (www.collective2.com) is the largest market place for black box trading systems. They claim to hold and monitor in excess of 2500 algorithmic



Screen shot 1.

today's competitive market we need to search for products or contracts where our defined strategy criteria are in place. No use watching a future or stock for days on end waiting for your trade criteria to hopefully appear.



Screen shot 2.

trading systems which can be viewed, reviewed and subscribed to. Some of these systems are characterised by their quirky names; Big Cat, Gold Survivor and Rocket Science. Collective2 posts the performance of all the trading systems allowing suitors to shop for an appropriate system.

Figure 1 shows extracts of a graphical example of the performance analysis of a system listed on the Collective2 website. The graph shows the comparative performance of the system (red

line) versus the performance of the underlying index (dotted line), in this case the S&P 500.

In addition to a graphical representation of the system's performance, a detailed breakdown of the performance analysis can also be viewed (Table 1).

The trading systems available from Collective2 are black box systems, written and coded by third parties so the algorithms normally cannot be changed or adjusted. An alternative, which is

becoming increasingly popular, especially amongst trading institutions, is the 'white box' system approach.

A white box system is subtly different to the black box in that it is your personal algorithms that make up the strategy. The advantage of this approach is the ability to easily tweak or adapt the system to changing environments or market circumstances, whereas a black box is closed and does not allow any adaptation to its factory fitted capabilities.

Algorithmic trading using the white box approach is rife in the hyper-competitive trading world as financial institutions now feel the mounting need for technology that aids their unique trading style. With a white box it is possible to rapidly compose or evolve algorithms to monitor, analyse and respond to market events in a specific way. Although the pre-defined black box algorithmic strategies are a great place to learn the ins and outs of automated trading systems, the user defined white box approach had greater flexibility and therefore greater longevity.

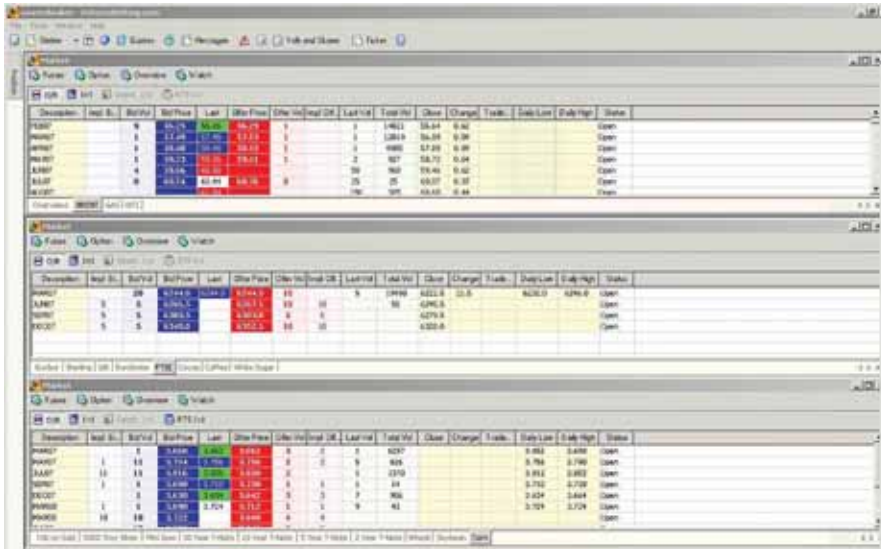
Automatic execution

There are websites available which allow you to create and code your own algorithmic trading system, for example Trade Station (www.tradestation.co.uk), eSignal (www.esignal.com) and →



Figure 1.

“IF YOU BELIEVE IN YOUR STRATEGY THEN YOU SHOULD TRADE IT WHATEVER THE MARKET FEELS LIKE AT THE TIME OF SIGNAL GENERATION.”



Screen shot 3.

Ninja Trader (www.ninjatrader.com) which can then connect directly to the interface of a broker for automatic execution.

FuturesBetting.com is one broking portal which can interface with any Collective2 black box system or system individually coded on Trade Station or e Signal. This broking interface will

Realism Factor	100.0
Trades	6
Profitable	4
Losses	2
Win %	66.7%
Cumu \$	\$52,573
after typical commission	n/a
Avg Win	\$13,301
Avg Loss	\$316
W/L Ratio	83.9:1
P/L per unit	n/a
after typical commission	n/a
Avg Trade Length	17.2 days
Annualized %	220.57% over 87 days
Sharpe Ratio	9.966
Max Drawdown	9.91% (20061027 to 20061102)
Risk of 20% account loss	0.0%
Risk of 50% account loss	0.0%
Risk of 100% account loss	0.0%

Table 1.

allow the automatic execution of any trading system via FuturesBetting.com's gateway to the markets.

This automation from system creation through to execution really is the pièce de résistance in the trading world. Financial institutions and fund managers have adopted automated trading as the core engine or backbone to their trading objectives. Individual traders and investors are close behind as systems building software, linking direct to brokers for execution, becomes mainstream. To have the link between signal generation and trade execution taken care of by some automated process means that discipline is maintained even during the most volatile market phases.

The advantages of automated trading

The automated execution has the headline advantage of removing your emotions from the final decision of

whether or not to trade. If you believe in your strategy then you should trade it whatever the market feels like at the time of signal generation. To have the link between signal generation and trade execution taken care of by an automated process means that discipline is maintained even during the most volatile market phases.

- The competitive arena which we speculate is forever embracing technological advances which in turn spoil some of the fun for the traders relying on manual signal generation and execution.
- The transparency of most markets means that the edge is harder to find. Automated algorithmic systems can scan multiple markets looking for a criteria fit.
- Trading psychology and discipline are difficult to master. Automatic execution removes the emotion from trading making it easier to follow your strategy precisely.

As trading technology continually advances, the race is on to find algorithmic supremacy. As a result some strategies are becoming forever more complex, demanding a greater need for automation. Now that the execution of trading strategies can be automated, the risks of ill discipline and human irrationality have all but been removed.

Simon Brown is a consultant at Futures Betting.

For more information on automatic execution via FuturesBetting.com, call +44(0)20 7183 0431 or visit www.futuresbetting.com