Trade A.I.

The Easy 3 Step System

How to build High Probability and High Return on Investment Trades using Trade AI Options Trade Analysis



Step 1: Select selling strikes

Options Trade Analysis tools are comprised of several parts.

Part 1 provides different Trading Ideas and analysis of the underlying assets and options strategies based of these Trading Ideas.

Part 2 allows building Your Own Option Trade that reflects your view on the market and risk tolerance level.

Here we will describe the easy 3 step system that you can apply after you select a stock either through Trading Ideas or by entering it.

After you select a stock (in this case WMT) click on **Price Trajectory Chart**.

quotemedia Options Trade Analyzer																
Date 05/0	Date 05/08/2019 - Symbol WMT Build Your Own - Number of Strikes ALL - Search Legend															
WMT (Walmart Inc.) Late: Wednesday, 05/08/19																
Closing Price: \$100.30 Change: (\$-1.00) Chart Earnings Date: 05/16/19																
Implied Vola	Implied Volatility: 26.91% Change: A 0.39%															
	Implied Volatility for May 17 Exp.: 37.52%															
Expiration D	Expiration Date: 05/17/2019 (9 Days to Expiration) M															
%ITM %OTM	Yield to Strike	Annual Yield	IV Skew	Optio Bid	n Price	Build Trade	Exp Month	Strike Price	Build Trade	Optio Bid	n Price Ask	%ITM %OTM	Yield to Strike	Annual Yield	IV Skew	
					Ask											
7.78	0.03	1.21	24.63	7.70	7.95		May 17	92.50	Buy 🔻	0.31	0.34	-7.78	0.36	15.46	41.61	
7.28	0.03	1.21	23.17	7.25	7.40		May 17	93.00		0.37	0.39	-7.28	0.41	17.78	41.42	
6.28	0.09	3.66	24.48	6.25	6.50	-	May 17	94.00	-	0.50	0.53	-6.28	0.55	24.53	41.08	_
5.28	0.26	10.95	28.77	5.50	5.60		May 17	95.00	-	0.69	0.72	-5.28	0.75	34.83	41.16	
4.79	0.37	15.92	29.74	5.10	5.20	•	May 17	95.50	Sell 🔻	0.79	0.82	-4.79	0.84	39.74	40.93	
4.29	0.52	23.05	31.39	4.75	4.85	•	May 17	96.00	•	0.92	0.95	-4.29	0.98	47.71	41.08	
3.79	0.62	28.05	31.30	4.35	4.45	-	May 17	96.50	-	1.05	1.09	-3.79	1.11	55.51	41.07	
3.29	0.79	36.99	32.49	4.05	4.10	-	May 17	97.00		1.20	1.23	-3.29	1.25	64.36	41.00	
2.79	0.97	47.13	33.10	3.70	3.80	-	May 17	97.50	-	1.36	1.40	-2.79	1.42	75.77	41.02	
2.29	1.12	56.13	32.91	3.35	3.45		May 17	98.00		1.54	1.58	-2.29	1.59	87.95	41.04	
1.79	1.32	68.97	33.30	3.05	3.15	-	May 17	98.50	-	1.73	1.77	-1.79	1.78	102.53	40.99	-
Select if yo	ou want to Bu	y/Sell Stock	-	Anal	yze Trade											

The Price Trajectory Chart allows you to set the initial probability based on the risk tolerance level that you would assume in your building of a trade.

Prior to an earnings announcement, when a stock's implied volatility is rising, we recommend using a 90% probability level. Outside of an earnings period, our recommendation is the probability level should be reduced to 80% - 85%.

After setting the probability level, the expiration date should be defined. For earnings based trading, we recommend the closest date to the "after earnings announcement date". If weekly expiration dates are available, then the next expiration date after the closest one could also be considered.

Your projection period should be set up to cover the selected expiration date. When all settings are complete, begin to select the expiration date on the chart.

Step 1: Select selling strikes



In the pop-up window, you will see Upper/Bottom band for price trajectory. These prices indicate that based on historical analysis, price of the stock with selected probability would not move Above/Below these prices (respective to the band).

Prior to an earnings period, the orange lines are based on historical analysis of the last 5 years. The green lines depict historical analysis of the earning period.

Upper/Bottom prices define selling strikes for Spread, Iron condor or other strategies, where stock price should not reach selling strike on expiration.

Step 2: Build and Analyze a Trade

Option trades are built based on a traders' perception of the future underlying asset behavior. Strategies to consider depend on what you anticipate:

Short Put or Put Credit Spread

Anticipate a Stock Going Up Anticipate a Stock Going Down

Call Credit Spreads

Anticipate a Stock in a Certain Price Range

Iron Condor

Different strategies, yet all have something in common. In all cases, the trader wants to know...



Based on the tolerance level, what would be the Upper and Bottom levels that the stock won't pierce on a selected expiration date?

Step 2: Build and Analyze a Trade

As it can be seen from the price trajectory chart, there is 90% probability that on Friday, May 18, 2018, the Upper/Bottom Earnings based prices would not reach \$105.92 / \$95.51 respectively.

This allows one to build an Iron Condor by selling an \$95.50 Put strike and a \$105 Call strike. To minimize the risk in this case, we used a \$3 spread by buying a \$92.50 Put strike and a \$108 Call strike.

After making the selection in the Option Matrix, click on the "Analyze Trade" button.

quotemedia Options Trade Analyzer															
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	1.32	68.97	33.30	3.05	3.15	—	May 17	98.50	—	1.73	1.77	-1.79	1.78	102.53	40.99

Our methodology allows you to assess risk associate with the trade from different angles by calculating multiple different probabilities. This new methodology brings together:

- Current methodology based on the assumption of normal distribution of stock prices
- Our unique Historical and Stress Test probability calculations
- Conversion of technical analysis indicators to the same unit of measurements probability
- Earnings Probability which takes into consideration stock behavior before/after earnings

		Probability of Profit										
1 Trade	Credit	Normal	Short Hist	Short ST	Long Hist	Long ST	RSI	SO	PPO	Earn Prob		
Buy May.17 92.50 Put Sell May.17 95.50 Put Sell May.17 105.00 Call Buy May.17 108.00 Call	0.78	84.7	92.4	92.4	93.12	93.12	95.03	92.73	93.38	81.13		

The result table depicts multi-prong approach to assessing probability and mitigating risk. Multiple charts are available to visualize the probability analysis.

None of these probabilities are better than another. Yet, if they are all lined up, then it is giving you a competitive advantage through a more comprehensive view on your risk assessment.

Closing price for WMT on May 17, 2019 was \$100.86. That means, as it was predicted, WMT price ends up between selling strikes, which provides a 35% ROI in only 9 days.

There are two major components to Probability-Based Trading: **Probability** and **Return On Investment**.

PROBABILITY

To accurately mitigate the risk associated with a trade, properly calculate the Probability of Profit. Current methodologies of calculating probability are based on an assumption that stock prices are Normally distributed. However, our research shows that this is not true in most cases.



RETURN ON INVESTMENT

Traders should interpret ROI value as each lost trade will wipe out profit of 100% / return on investment.

EXAMPLE

Based on the prior example for Wal-Mart stores, ROI calculated as \$0.78 credit divided by investment, which is \$3 - \$0.78 and would be 35%.

Therefore, each lost trade will wipe out approximately 3 profitable trades, since 100% divided by 35% is 2.86.

The Proper Relationship between Probability and Return On Investment

Probability based trading requires consistently building trades that not only have a high probability of success, but also have a certain potential ROI. Only a proper correlation between Probability and potential ROI will make your overall trading profitable.

80% probability can be interpreted as: out of 10 trades you are more likely to get 8 winners and 2 losers. Now let's assume that for each of these trades your ROI was 17%, your probability of success was 80%, and your average investment per trade is \$1,000.

For each success:

• You will earn \$170 (\$1,000 investment x 17% ROI).

For each loss:

- You will lose your initial investment of \$1,000.
- This is equivalent to the earnings of 6 successful trades.

If you conducted the trade 10 times:

- Your expected 8 wins would earn you \$1,360 (8 x \$170).
- Your expected 2 loses would lose you \$2,000 (2 x \$1,000).
- In total, you would have lost \$640.

Not paying attention to this relationship between Probability and ROI is a common reason why most traders, even those who are selecting trades with a 80% probability of profit, end up losing money.

That is why the relationship between Probability and ROI is so important.

Minimum Required Relationship										
Probability	70	75	80	85	90	95				
Minimum ROI	43	34	25	18	11.5	5.5				

Wal-Mart Stores Iron Condor trade (described above)

The trade has an overall around 90% probability of success and a Return On Investment of 35%.

Statistical interpretation of this trade is that if we take 10 similar trades, we will win 9 times and lose 1 time.

According to the ROI, this one lost trade will wipe 3 profitable trades, which will leave us with a **net of 6 profitable trades**.

How you can trade out of a \$25,000 options trading account?

The duration of this trade was only 11 days. This means that during the earnings season you can make, within a month, 2 round trips with the money in your account.

If you invest \$2,500 per trade with the similar Probability and ROI not even as we described in Wal-Mart Stores trade, but on average equal 20%, then you can make 20 trades per month with an average profit per trade of \$500 (\$2,500 x 20%).

With 8 net profitable trades (20 trades x 90% - 2 x 100% / 20%), you will earn \$4,000 per month (\$500 earnings per trade x 8 net profitable trades).

In one year, your earnings would be almost \$48,000 (\$4,000 per month x 12 months). You will have almost tripled your initial investment.

Summary

Probability-based trading is driven by statistics. If you make only one trade you can win or lose. Probability does not work on small numbers. If you want to match the results above, you have to constantly trade, at the same time remembering to keep the proper relationship between Probability and ROI.