

Multiple Losing Streak Probability Calculators – Pt1.

A Super Traders Testing Tool

All Super Traders trade within a structured framework, one that is coherent with his or her beliefs. [INTERNAL : MIND]

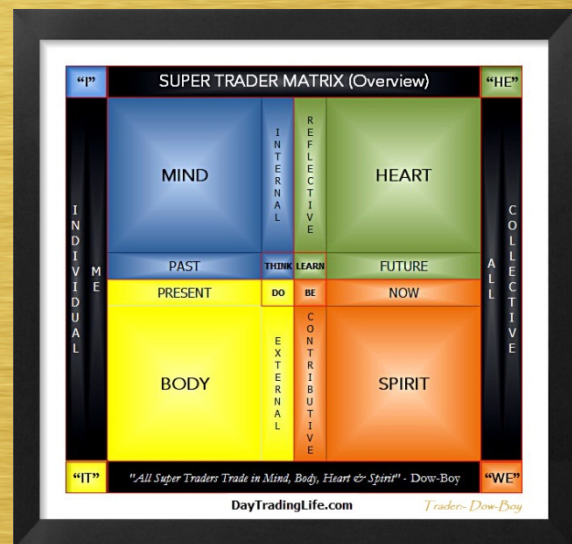
The Super Trader's trading system is an alignment of his chosen 'rule set', his objectives governed by his vision. This is his 'Real World' mechanism that can convert his goals & aspirations, into his desired results; tangible monetary (£) gains. [EXTERNAL : BODY]

All trading systems require feedback to improve. All Super Trader's incorporate a measurable systematic feedback loop. Processes that can monitor, evaluate, modify & develop various aspects of its structure. Various testing tools can be applied to help identify possible weaknesses within a system. One such tool is the;

“Multiple Losing Streak Probability Calculator.” [DETACHED : HEART]

Streak Calculator: 'Cautionary Note':

It is extremely important to note that one uses this **'Losing Streak Probability Calculator'** within a conjecture of a 'Super Trader's State of Mind.' A state of mind that is completely aligned & seamlessly congruent by his **Beliefs**, his **Vision**, whilst utilising considerable **Feedback**. This 'holarchic model' culminates into a seamless balanced collective in;
[MIND : BODY : HEART & SPIRIT]



"A Super Trader thinks feels & acts within the realms of PROBABILITIES." – Dow-Boy.

So, your chosen frame of reference whilst using this calculator should predominantly be to consciously focus on **'Statistical Probability.'** Trading per say is **NOT** about 'Winning' or 'Losing.'

Remember: "Trading Is A Game Of Probable Outcomes."

“Multiple **L**osing Streak **P**robability Calculator.” Focus On the **P** Not The **L**!

Multiple Losing Streak Probability Calculators:- Technical Note:

My quest in the creation of this calculator was driven by two things.

1. A lack of accurate reliable data on the web regarding 'Consecutive Losing Streaks'.
2. My Bias towards 'Right Sided Brain Function', Creativity! I do enjoy the creative process.

The WWW. Lead me into various trading forums, websites & blogs which culminated in frustration in many ways. I won't elaborate. I had to seek help & 'custom build' in order to create a 'Losing Streak Probability Calculator' that would provide accurate results.

So, with the help of some very clever coders I was able to bring my idea to life & co-create a spreadsheet for traders relating to losing streak probabilities. I asked one of the coders 'BruceZ'

if he could (in a not too technical manner) describe how the implementation of his VB code worked within the dynamics of this spreadsheet. I asked this for two reasons.

1. To give you a broad understanding as to what is going on '*Under The Hood*' within this calculator. Via this higher level of comprehension you can benefit & maximise your utilization of this probability spreadsheet calculator.
2. **CONFIDENCE**. Confidence is the highest order belief within a Super Traders psychological makeup. It's only with confidence that one can truly overcome fear. By increasing your knowledge, you increase your faith & confidence in its function & the accuracy of the data that this Multiple Losing Streak Probability Calculator returns; you will in turn have **CONFIDENCE** to make any necessary changes to your trading system you see fit; having 100% confidence in the calculators returned results.

BruceZ's Coding Comments:

"Losing Streak Calculator."

Two functions were written in Visual Basic which work with the Excel spreadsheet to compute the exact probabilities of runs of consecutive losses.

The first, called ProbRun, computes the probability of 1 or more runs of consecutive losses in a given number of trades for a given probability of a loss. This is computed by a recursive difference equation given in the code comments. For each trade, the previously computed probability that a run occurred by the previous trade is added to the probability that a run ended on the current trade multiplied by the probability that no run has occurred earlier.

The second function, called ProbRunMulti, works with the Quick Calc to compute the probabilities of multiple runs of consecutive losses within a given number of trades, where each run is separated by 1 or more wins. This also works by a recursive difference equation given in the code comments. In this case, for each trade, the previously computed probability that a given number j or more multiple runs occurred by the previous trade is added to the probability that a run ended on the given trade multiplied by the probability that an exact number $j-1$ of runs has occurred previously. This final probability is computed by subtracting the probability that j or more runs occurred previously from the probability that $j-1$ or more runs occurred previously. This requires retaining 2 sets of values for j or more runs, and for $j-1$ or more runs.

The first routine, ProbRun, conserves memory by implementing a circular array. This means that the amount of memory used does not depend on the number of trades. Instead, the array size will be equal to the run length plus 1, and the number of bytes will be 8 times this since double precision is used. So for a run length of 15, this array will use just 128 bytes.

The second routine, ProbRunMulti, could also have been implemented with a circular array which would have reduced the memory usage to a small fraction of what it currently uses, but it was decided that it was more important to preserve the simplicity and understandability of the code instead, and that the extra memory usage should not present a significant problem. In this case, the array size does depend on the number of trades. The array size is equal to $2 \times (\text{number of trades} + 1)$ since there are effectively 2 arrays being reused alternately to store retain the two sets of values. This will use $16 \times (\text{number of trades} + 1)$ bytes, so a million trades would use about 16 megabytes."

Many Thanks BruceZ for his synopsis; & just to reiterate what BruceZ said; you can find additional comments within the VB code of all the spreadsheets.

Calculator Gallery



Multi Calc 1



Multi Calc 2



Monte Carlo



Mersenne Twister



MT-Model 1



Quick Calc 1



Losing Streak Calculator Download Area



Multiple Losing Streak Sheets

["Multiple" Losing Streak Probability Calculator – Excel 2010 \(.xlsm\)](#)

["Multiple" Losing Streak Probability Calculator – Excel 97-2003 \(.xls\)](#)

Monte Carlo Simulation Versions

["Monte Carlo" Losing Streak Probability Calculator – Excel 2010 \(.xlsm\)](#)

["Monte Carlo" Losing Streak Probability Calculator – Excel 97-2003 \(.xls\)](#)

Mersenne Twister Simulation Versions

["Mersenne Twister" Losing Streak Probability Calculator – Excel 2010 \(.xlsm\)](#)

["Mersenne Twister" Losing Streak Probability Calculator – Excel 97-2003 \(.xls\)](#)

ALL In 1 Packs.

[All Losing Streak Probability Calculators – For Excel 97-2003 \(.xls\)](#)

[All Losing Streak Probability Calculators – For Excel 2010 \(.xlsm\)](#)

["The Big 1" – All Losing Streak Probability Calculators – \(Excel 97-2003 & Excel 2010\)](#)

Trade Example & Questions

Hypothetically; one of your day trading strategies generates an entry signal approximately 3 times a day, which equates to 720 trades per trading year (3×5(Mon-Fri) x48 (Trading Weeks A year, Allowing for weekends & Holidays). This strategy has a win rate of 50%.

Question 1: “What is your statistical probability that within this 720(n) Trade run that your system will generate 5 consecutive losing trades in a row? Do you know?”

Question 2: “What is the statistical probability that it will also generate 2,3, or even ‘4 or more’ consecutive losing streaks of 5 trades all within this same (n) trade series length?”

Would you like to know? Well, now you can by using the DTL ‘Multiple Losing Streak probability Calculator.’

IMPORTANT: Learn HOW To Question!

To get the most out of these spreadsheets you need to understand what questions to ask, & why you are asking them, in other words; “HOW to question.” These spreadsheets return accurate **VALUABLE** data, a perfect characterisation of the ‘Pareto Principle.’ 90% of their power lies buried within the context & quality of how one questions the data!

A good Question Presupposes a good answer. The “would you like to know?” isn’t a very good question; as to know just for the sake of knowing. It has no positive effect, **[INTERNALLY : MIND]** & **[EXTERNALLY : BODY]**.

So, maybe we should question “Why? Why would I want to know?” “Why am I generating 5 losing streaks more frequently than I should be statistically?” This again isn’t the best question to ask.

To just delve a little deeper here, as this is important & is ingrained deep within the psychological thinking of ALL Super Traders. “Why?” Why is very much associated with a negative attitude & a complaint riddled mind-set. “Why did I get stopped out?” “Why did I not follow my rules?” “Why did I sell too soon?” These types of questions indicate a level of thinking that initiate & create a negatively charged neural net; which aid in nurturing damaging & destructive emotional responses.

REMEMBER:

*“The words you chose in your questioning go a long way in
Not just what answers you receive, but in “WHAT YOU BECOME!”*

Snapshot: Taken From The "Multiple Losing Streak probability Calculator."

Losing Streak - Quick Calc	
Enter Yellow Cells Only*	
# Trades	1,000
Losing Streak 'No'	7
Loss Probability %	48.00%
Results For Losing Streak Lengths Of (7)	
1 Or More Streaks	95.54%
2 Or More Streaks	81.32%
3 Or More Streaks	59.05%
4 Or More Streaks	36.13%
5 Or More Streaks	18.71%
6 Or More Streaks	8.30%
7 Or More Streaks	3.19%
8 Or More Streaks	1.07%
9 Or More Streaks	0.32%
10 Or More Streaks	0.08%
11 Or More Streaks	0.02%
12 Or More Streaks	0 %
RESULTS:- ARE ALL LOSING STREAKS	
CLICK TO CLEAR 'QUICK CALC DATA'	

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THE QUESTION IS HOW?

One of my favourite quotes from Einstein is:

“Problems Cannot Be Solved By The Same Level Of Thinking That Created Them.”

Super Traders & successful individuals evaluate in a positive way, by asking “**HOW?**” If you don’t question this way already; then do take this on-board earnestly. It’s hugely significant; a paradigm shift with vast implications. Asking “HOW?” **IS** questioning at a higher level than the problem. All Super Traders are happy, content & grateful individuals. They have learnt to ask “how?” & not “why?”

Again; please take in the above seriously. It really is a huge key to your success as a trader & in living a truly fulfilling life. How you speak to yourself [**INTERNAL : MIND**], the words you use & **HOW You Question** & evaluate everything will determine your results.

Another friend of Einstein; Sir John Wheeler (physicist), famously said;

“The act of us searching, expecting us to see something, will ALWAYS create something for us to see.”

Again, it’s in HOW you question & evaluate. It’s not in how one OBSERVES things; it’s in HOW you **PARTICIPATE** with these spreadsheets that will determine what types of results & answers you will receive from this creative process.

For now; this concludes Pt1 regarding these “Losing Streak Probability Calculator Spread Sheets.” Later; in Pt2 I’ll discuss various ways in which you can get the most out of these spreadsheets; including:

1. “HOW to question,”
2. What kinds of questions you should be asking yourself.
3. Several examples & different scenarios.

By utilising the above tips & guidelines that I’ll share with you in the coming Part 2, you’ll be able to view the data that these spread sheets reveal from a higher level, a ‘**different**’ perspective that WILL ensure you get ‘AN EDGE.’

I hope you enjoy using these very useful ‘Losing Probability Spreadsheets’ as much as I’ve enjoyed being a part in their creation.

Many thanks again to: SHG, BruceZ & Duncan Werner for all their help & their contributions in the making of these spreadsheets. Without their help, these sheets would not be here now.

I Thank You All.

“I wish you well in your journey & in your trading.”

DowBoy b.1967 – Written 1st-December-2011
<http://www.Daytradinglife.com>