My Trading Principles

ReversalRadar

Price Reversal Detection Systems

How to Find and Implement Your First Trading System

(How I Created Reversal Radar)

by RJ DeLong

Introduction:
Technical Analysis for Investors

How you choose to invest is up to you, you may decide to put some of your money into a trading plan or devote to buy and hold for your entire portfolio. Either way, undoubtedly you would like to increase your odds of buying at the right time as you come into greater and greater savings over the course of your life. Your entries and securities selection can be improved with some basic technical analysis knowledge and trading experience.

What System is The Best?

The system you ultimately choose to implement when it comes to technical analysis is, I do believe, a function of your personality. Personally, I like to get my money in early, so I prefer to act on short term signals like candlesticks and price action for more precise and aggressive entries. The trade off is that I'm often too early and the trend takes a decisive move against me forcing me out at a loss more often than if I had waited for a confirmed trend change to develop. As a result, others prefer to use a lagging indicator such as a moving average cross or a resistance breakout and ignore candlesticks or bar chart patterns altogether. Ultimately, one can become a successful investor / trader with either type of method, as no group gets all of a particular move.

I want to get all of a move

Your aim shouldn't be to get all of a particular move either, but instead to concern yourself with being profitable and taking consistent money out of the market. Pay no mind to the percent of a particular move you capture so long as your system is profitable and you don't go bust from drawdowns you will make ungodly sums in the market.

Think of yourself as a surfer. You can float around off the coast leisurely waiting for the next big wave (or easy wave) to come your way - no reason to have to ride one wave all the way to shore. There is always another wave. As a trader you can ride all day hopping from one profitable wave to another finding setup after setup all day every day.

Learning to Make Distinctions

This being so, getting to know a system to discover and learn to make distinctions - as Mark Douglas says in his book, The Disciplined Trader, is really the more important aspect of improving your system's performance. The point you begin to recognize these distinctions and make further refinements to your system's trade rules is when you can reduce a significant portion of losing trades (both in number and degree), and thus turn an important corner from breaking even to becoming highly profitable in your career as a trader and professional investor.

The First Step - Absolute Rule Adherence

Although I didn't mention this, the first step in your trading progression should be to control your own emotions to the point where you are following your system's rules without deviation. This is where you will move from a losing trader to at least a breakeven one - which is a HUGE accomplishment. Many never reach this level of inner mastery. Mostly this is a long process of trial and error because when you are new you just have no idea what to expect and cannot identify what a winner feels like or what a loser feels like so you have difficulty deciding if the trade is not working. In due course you naturally want to give your trades more fighting chances than they likely deserve which allows losers to run and your net profits to go negative. You constantly question your trade because you have no experience for where on the spectrum of good to bad you lie during your particular trade's development.

Find a Mechanical System as Training

One thing that can be very helpful in this regard is to find and apply a mechanical system from any author of a trading book which has very clear rules you can follow. Follow that for awhile and sharpen your inner game to abide by the rules. During this time you will also learn what prices tend to do and how charts look in various stages of market cycle: accumulation, distribution, and correction. You will begin to notice how the candles develop intra-bar (before the bar closes). I know what you are thinking... What the bar is closing? Last call? I'll take another Johnny on the rocks! No not that bar.

Ok welcome back everyone. I have your attention again. Good.

Oftentimes, you will find the developing bar changes drastically from where it goes initially and it's final form (its kind of funny imagining I'm still talking about that other type of bar with your whiskey on the rocks isn't it? ...maybe I am...), and you would never know this price action existed by looking at the final bar - the only one you see in historic charts!

Simplifying Your Decision Making: Trade the Close

Something which will help you in this regard is to trade off the close of bars only no matter what. This will ensure you don't go crazy with so many decisions at every intra-bar move away from your price target. It will increase your losses on losing trades because you would save yourself early on real losers, but it will increase your winners too because you will hang in to the close of the bar and avoid unnecessary shakeouts from the common head fakes. To compensate for the perceived added risk you can reduce your position size, but also know that you will get additional benefit to the upside many times as well.

How can I say this? One reason this tends to more than compensate is intra-bar movement is more random than moves from the closing prices so you are looking at less important data. Second, you will tend to make more bad decisions because of the sheer number of decisions you have to make. Furthermore, in many trading systems and indicators the closing price of the bar is all that is accounted for and the ones that account for other bar prices use a H+L+C / 3 average typically. All of which are calculated after the close since you don't know these until then!

An Example of a Minor Nuance

By the way, from all the studies of nuances of system or indicator modification that I've read, most only marginally improve overall performance. As an example of a nuance change that seems to make very good sense, but in fact has only a marginal improvement is Chaiken Money Flow (CMF) vs the older On Balance Volume (OBV). OBV attributes all volume in the day to the winning side (up or down) regardless of if the day was only slightly an up day or a big up day. CMF corrects for this by accounting for what percentile in the day's range prices closed.

Example: Small up day

High 51
Low 48
Close 50
Volume = 100,000

The stock moved up 2 points from the low to the close (48 to 50), down 1 point from the high (51 to 50), and giving a range of 3 so CMF would logically credit the up day with 33,000 shares of up volume (2-1)/3 x 100,000. OBV would credit 100,000 shares to up volume even though much of that volume was down volume.

The reason this nuance ends up as inconsequential is that there are equal types of slight down days fully credited to down volume that shouldn't be, so it ends up a wash in the larger picture.

Essentially it's the same idea with the proposed "only acting on the close" rule. Sometimes you'll get smacked, prices will gap down against you and keep going, but it's worth it because sometimes you'll get a huge bar in the right direction that you would have sold early too. The real benefits are fewer decisions needing to be made and being able to make them in a more regular and consistent manner. Lastly, if you really want to trade more frequent price action you can simply move to a shorter time interval and act on the close of those bars.

Where Can I Find a Good Mechanical System?

Several good logical and simple to follow systems are available in John Carter's book, Mastering the Trade. This was the first one that I found to give very clear rule based systems you can implement. Another was Trading the 10 O'clock Bulls by Geoff Bysshe. Or you can do a search for "mechanical trading systems" and you will be sure to find many from which you can choose. Yes, but how will I know if it's good?

What's the best system?

One last piece of advice on this topic: don't search for the best system.

It will take you a lifetime, and it will be an elusive moving target that you never pin down because markets change. Find one that goes along with what you are trying to accomplish as far as sort of how or where you like to buy. Why? Because you want it to go along with your natural inclination of timing what you want to do. It's important to align your system with your gut.

What type of trader are you?

Do you like to buy on dips?
Do you like to buy on breakouts?
Take a look at the stocks you are attracted to and ask what they have in common.
Are they all really low?
Are they high flier tech stocks?
Are they slow steady climbers that sort of just go up at a diagonal with no real moves above or below the moving averages?
What is their average price?
Do you like finding stocks that have several green bars in a row and hope to jump in in the middle and have the run keep going?
Maybe you like to buy after a nice v bottom?
Or after a semi circle consolidation as it

approaches the moving average for a continuation?

This is where you need to begin: with answering these questions about yourself.

If you asked me years ago what type of trader are you? I'd say I don't know... I just want to make money. What works?

What works?

I seem to remember having this conversation with several traders because I always wanted to learn. They would say well it depends. It would drive me crazy, because I could never get a clear answer on what they did. I thought are they keeping it a secret? Or can they just not articulate it? Well the truth I think is many simply don't really know what how to explain their learned behavior pattern which has taught them how to make money, they just do it. They have principles but also exceptions and they've never really analyzed it down to codifying their rules or even realizing what exactly they do in all the various situations they encounter from time to time, which is one reason so many fail. They are not organized enough to articulate their plan. The ones who were very successful would tell me things like. I use relative strength compared to the SPY combined with multiple time frames to enter and exit at support and resistance. Bit that's not a strategy, thats a category of strategie, and to me that sounded great but didnt help one lick.

What is a Strategy?

A strategy, as defined by game theory, is a complete set of exhaustive rules that tell a player what to do in any and all situations. These guys had a strategy but they just didn't want to waste time trying to explain it to someone who had no experience to implement it. In retrospect, they all gave me good advice. The ones who said I just needed to figure it out on my own were right. Granted, they could have given me some guidance (as I'm trying to do for you) or explain more why *experience* is such a key aspect to learning in the art of trading. Alas, I just needed to get in there and watch the market and try to apply some system and trade really super light until I knew my system and I were both working.

So when you ask where is the best place to buy or what is the best strategy you have the natural question on your mind, but it's just not the right one.

So then the perhaps disappointing answer is that all valid entries are valid entries, really! You can make money everywhere, just ask what picture makes you the most comfortable and why? Why do you like entering there?

You'll see no matter what you say there are trade offs. Some people like to buy support because it's low and they are frugal types basing it on the logic they can make more and it's safer because if it goes down it is going to be close to a stop, so it will lose less when it loses. (That's me by the way.) All true, but what is the trade off? You will realize more smaller losses to compensate for your bigger wins. If you wait for more confirming action you will be buying higher and thus getting less profit, but it will have already increased your probability of success.

Right there in this debate you should see your preference and be able to know which you like better for now. Go with that, and start looking at systems until you find one you agree with - one that you think is telling you how to do what you already want to do. There is no more research that needs to be done on what you like except go to a chart and point to it and say right here how can I buy here?

Buying the Absolute Bottom

It better not be the absolute low because its pretty difficult to do that. You have to see what these look like and feel like on screen many times before you even know what to look for and even then, you need to be so patient to wait for only one entry in a year or something that it becomes a quest for the holy grail and often a fools errand. Only if you are sitting there watching the crash can you maybe identify this bottom or top.

There is a saying traders follow that maybe you have heard: "*don't try to catch a falling knife*." Trying to buy the absolute bottom is counter-trend trading, which is more difficult, so why make your beginning into one of the most difficult endeavors in the world (trading) even harder? I promise you the skills and experiences you learn from trend trading can suit you in counter-trend trading down the road once you've mastered trend trading. So remember, "*the trend is your friend.*"

My advice is to find a more common support area to buy on such as trend line support or previous resistance, and start there (if you are attracted to buying dips). Make sure you buy in an upward trending stock to give yourself the best chances. If you like to join rallies after they are really moving, look at momentum trading with MACD or RSI. There is no perfect indicator and it doesn't matter which you choose, but how well you come to know the one you pick - kind of like women. It takes experience, trial and error, and also some book knowledge to understand how it works generally to begin. Hahaha.

Things That Froze Me

Now for some more detailed questions I got hung up with as a new trader which sapped my confidence for far to long. What is the buy and sell signal for this indicator? There will be various, and you may find yourself in a freeze because you wonder which one is best. So you start looking at various charts and the indicator seeing where it would have gotten you in and gotten you out, and you see at the end sometimes it worked and sometimes it didn't. Sometimes the other entry rule worked better, and sometimes this one did. Or sometimes this indicator seems better but no wait look here you would have gotten crushed...

Choose one! Read up about it. Learn who invented it and why and how its meant to be used and there will be numerous systems using it with different buy signals and configurations. Just pick one blindly even if you must, and just start using it. Choose one that is easy to spot on your indicator underlay or overlay - tweak it so it gives you a little plus or dot or something as a clear signal. I dont like guessing which line is higher show me the numbers! If you are using a crossover signal for instance, have it show the numerical values of the signal lines and when they cross regardless of by how much, buy! Well your system is going to give you more than that but if it meets the criteria buy! If you want to always wait for the 2nd day after they cross to make sure they are still crossed, fine! Just set a rule that is black and white and follow it. Don't worry about these little nuances!!! Don't let the doubt of your nuances being valid stop you from following the system. It's so important this piece of advice. Otherwise you will wait and read and think you need to learn programming or find someone else who makes money and ask them these questions... And we have discussed this. I will tell you what, no trader I've ever met can explain his own system. They either are just to disorganized to have really broken it down, it seems overwhelming to try to explain all the variations, or they trade completely on feel. In most cases the writing out of a complete and fully exhaustive system of what-ifs is beyond what most traders go through, even though it's one of the most common pieces of advice I've read: *plan your trade, trade your plan.*

You might say oh no RJ, I can't make my own variations to a system! I want a proven system that I can just follow! But even that system will likely have conditional gaps that you have to fill in because it won't be clear in certain cases what to do. Just use your common sense I urge you and make rules for those gaps yourself and follow them. I'm not talking about totally inventing your system, find one. I'm simply saying if after you have a system and you find yourself in a situation where you need to make a decision about a nuance of the system, just make a choice that seems to make sense. This will be true when you choose your money management system.

What is the Best Money Management System?

Should you pyramid or not if so how much and when? Should you exit some of your initial stake to reduce risk? Etc. These questions are again really just how you like to take money out of the market and totally just do what seems pleasant psychologically. I like to buy in a bit more early and exit some after the first rise hoping on reenter it if prices become back to my initial entry. Some guys like to pyramid (add as prices go in your favor), I don't usually. I like to sell as it goes up and locking some profits not keep having to fear a throwback at 3 successive entries. Other guys like to know they only have a small piece invested initially and would like to gamble their profits instead of principal. Both make sense, so decide what you like. Just typically, don't add to losers. That's illogical usually. If a stock goes down 50% and you only had a toe in the water do you think you can buy more in that case? Absolutely. So again, if it feels right do it. But if you hear that alarm going off in your gut as you ride your loser another bar and then another bar, waiting and hoping for it to turn into a winner...? Earth to Matilda (Zoolander): listen to it and dump that shit.

Simplify Your Future Decision Making Part Deux

Make "easy to follow, easy to distinguish" rules.

Don't say something like: I will buy only if my indicator makes a sharp v bottom below the oversold line. Why? Because there will be plenty of debates with yourself what constitutes a sharp v bottom!!

Make a numerical rule and follow it. For example, I want to buy on trend line support. "I will buy once prices close within 50% of an average bar length from trend line support as given by the average bar length of the last 20 bars and the trend lines connecting the lows of the last two swing lows." Or simply "I will buy when prices come to within 1% of said trend line."

Some Calming Advice on How to Draw your Lines

Bulkowski's book on technical analysis is great for an example of how one doesn't need to be so picky about definitions of what is a swing low or what constitutes where to draw a trend line. He jokes around a lot as he teaches you, and you learn to not let these types of details freeze you. Details are important in trading sure, but it's more about being strict in your exits than your entries. Lay that trend line where you think it goes and then follow the rule you set for where to buy by eyeballing it. If it looks right to you it probably does to everyone else too, so go ahead and buy because they probably will too - after you. There is no perfectly right way or place to draw trend lines. Sometimes I cut off highs on my resistance trend lines (make them external to the trend) if it makes the line connect more highs on the line. This would say my theory is the particular highs I cut off were an anomaly or a fake out and the next rally won't go to that extreme - none of the other rallies did. You know when you are looking at a trend line break that it could reenter on the next bar so just draw the line where you think it looks best. If it does re enter you get back out.

Playing Breaks of Trend Lines

I tend to give trend breaks 2 or 3 bars to make sure its consolidating outside the trend line before I enter as a trend reversal play or as an exit after riding a trend. These should be small bars if you are planning on taking a position after 2 or 3 bars. If it's running for 3 bars with longer than average solid bars, you missed a good deal of the initial move (and should have reversed sooner - after the second bar confirmed the first strong bar close outside the trend). So if you do at that point act and you get a winning bar you probably exit a good share of your initial entry to protect against a possible violent retrace. That or you enter very light.

Markets only conform maybe 60% of the time anyway so don't sweat perfect precision. Better to develop your nimbleness and flexible mindset to reverse your position when your trades are moving against you than sweat about being so precise. Just give yourself a clear rule so when it goes against you, you know where your action to enter or exit lies.

Your Human Brain and Gut Indicator

Do you have a human brain? Yes? Ok good, then you can trade. The human mind with no financial knowledge or experience has the ability to recognize a pattern and the end of that pattern. That's all this takes to identify opportunities of profitable trade setups. This human brain working along without your conscious effort is capable of giving you feelings in your gut of what is going to happen next, and you should trust your ability to be right.

Learning to Trust your Gut Indicator

For a long time I didn't trust my instinct thinking that I lacked experience or knowledge of indicators or when to apply them or a professional trading algorithm. This kept me in a state of conflict between my incomplete system and my gut. It may sound like I'm contradicting myself now, because I told you to follow rules so how do instincts come into play?

Well they come into play before your stops are hit or to manage your winnings on the way up or when to just exit or lighten your shares even when you are even... This might take time for you to develop know WHAT to do with your gut's urge... But it might not, usually if you feel you should lighten, you should. If you feel like maybe you should go heavy, usually you should go a little heavy, but if you're just going heavy and feeling rushed or kind of frustrated, that's a huge huge red flag. That's when disasters happen.

Sometimes, in fact oftentimes, even when I'm following all my rules I'm still acting on my gut instinct to adjust my position size, but I must say that is because part of my system is acting on candlesticks and price action, but it's advantageous to have a purely mechanical system in the beginning before you have developed confidence in your instincts. However, once you feel that feeling of this seems different now... The price did this and I'm not really seeing something on my indicator, and I know the trend line isn't broken, but I have this feeling... You can usually trust that. It took me a while to listen to that, because, as I said, I always thought "well there is no valid trade setup for that feeling" or "how can I justify acting on that?"

How Does Your Gut Indicator Work?

I think now what the answer is is that the human brain naturally senses the momentum in a stock. Momentum is just speed of price change, so it's vertical movement on a chart. It's like when I throw a ball in the air you can see it slow down, arc and flatten out at the top. Prices move like that too, and you can see it and feel it as it's happening. Prices can also move like a rocket straight up, this would be like me changing the trajectory of my throw to straight up. The ball will still slow down eventually, but the arc will be different, as will the path to earth more straight down. What's different about price movement vs. gravity acting on an object is that it doesn't have to fall after a stall. It could get launched again, or it could get hurled back to earth even faster than it rose. However, a gradual slowing is the typical case and when this happens you are usually correct in selling, especially if it was a better than expected run.

Trading Surprise Happiness

A few notes on trading off your gut. I've found that if I'm in a position and I'm surprised by a strong unexpected move in my direction, it's best to exit some there because it's likely to be a reversal point. If I'm not in a position and I'm watching a stock to buy, and it puts in a long red bar but doesn't violate trend line support, which makes me feel surprised and happy when I see it, but also a little afraid to buy, it's generally right to buy. In general, if you are happy and surprised the market gave you a good price to do what you already wanted to do, take advantage of that price because other people will too.

What is Momentum?

So the human brain can sense momentum which is simply the speed of price, shown by the slope of the line connecting the closes. Acceleration of price would be ROC, rate of change, and that is like when the slope increases you have a positive acceleration.

When *price* increases you have a positive speed or momentum (MACD, RSI).

When the *slope of price* increases you have a positive acceleration or Rate Of Change (ROC).

If you use candle charts your brain processes everything, the color of the bar the size relative to other bars, the change in average bar size, open close high low, gaps, shapes of the curves between highs and lows... It's capturing all that data and processing it and spitting out a gut feeling to you. So in a way, your gut is the best indicator you have and when you experiment with testing it (using it and only it 100% of the time for a while) you will see it treats you pretty well. Try it, just do what you think and feel is right at any given moment and you will learn to understand your gut indicator. It's super valuable. Learn to listen to it. We all have it and it's already equipped to guide you.

When My Instinct is Typically Weakest

However, over many hours on the simulator testing my gut I know mine has weaknesses in certain situations. For example, my gut has a hard time holding shorts on the first test of my entry.

Navigating a Short

Let's say a stock breaks it's 50 day moving average and puts in a fresh swing low, bounces back up, and returns to the now negatively sloped 50 day line giving me a great and traditional short selling setup. I take it and enter a small short position of 15% of my portfolio, leaving 85% in cash. (To me this is small depending on the ATR (Average True Range) of the stock and my planned stop exit, but it depends on these factors what is big or small. Let's say my full on position size once I scale all the way in is 50% of my portfolio, I'm only taking a 1\3 position here.)

OK, anyway, assume it works initially, and the stock plunges off the 50 day line to decline back down during the first bar of my trade. Alright we like that! Second bar continues south. I'm feeling good! All is right with the world. From the third bar onward the stock gives us 3 tame little steady declines in a row. As I sense it slowing and losing momentum on this first push I like to sell half or maybe just a third of what I picked up initially.

I do this for a few reasons: to give it some room to rise back above my entry without me incurring a loss should that happen and usually, almost in every trade you have a return to your entry price around 5 to 15 bars later. Well, as it comes back in close to my initial entry I feel uncomfortable and poised waiting to defend. This isn't my gut acting on the *price movement* but acting on my *account balance*. Its not a good thing to trade based on emotions of your account balance or PnL. What I do is let go of that 1/3 of my initial 1/3 (or half of my initial 1/3) to compensate and help make this easier on myself. It limits my losing trades, gives me more flexibility since I'm less committed, and allows me to stay in the battle with more leeway to my stop and therefore I'm able to stay in for more winning trades. Generally, if I let it go at a decent enough time on the first small run, I can buy back in (reshort it in this case) at my initial entry. I saved myself some loss of profit and can also add up to a 2/3 position size as well here.

Once in a while, I lose this battle of nerves and exit even after I've upped my position just how I wanted. Based on some faulty-fraidy-cat-gut-impulse, I exit only to see the stock sell back off and a perfect trend-conforming breakdown running for what would have been a monster trade.

So I learn to tell myself don't try to always avoid every loss. It's OK to take a loss here if the stock knocks you out. Even if it does, you can always reenter your short if it gets back below that 50 day again.

Sometimes my personality make up is a bit too frugal for my own good. I want to avoid small losses a bit too much, and I exit before the thing gives me a true exit direction just because I'm afraid of an upward blast.

This is where using the momentum indicator is helpful too. You can see does that look how it should because I know my gut isn't reliable right at this point - the maximum pain point when you are about to jump ship. But usually I use the clear bar closing out of the typical recent range say the last 10 bars or so. Sometimes I give it two bars because one bar might be a setup for more shorts to jump on top of it an push it right back down.

Well my point here was that you can trust your gut no matter your experience level. Your gut is valid. Get to know it in situations like I know mine on the first test of my short. You'll be good the longer you stick to this. Trade with the attitude you can be wrong and it's ok, you are learning. Think this way, and you'll lose less.

Trade On a Sim

Many people say you need to pay to learn in this business, and partially that's true. What's maybe more true is that just because you may have mastered a sim it doesn't mean you've mastered trading. Live markets are slower and that means more time for you to wait and agonize for the result. It also prevents you from seeing and feeling the momentum as easily. Lastly, it allows you to experience things like slippage, gaps, commissions, and the pain of real money losses. This all being true there is no better way to learn how prices move and practice a system and a money management plan and see it work and your account snowball to give you the confidence you need to implement a real system. You can go through all the real behavioral melt downs from going all in and and holding all the way through a selloff that never comes back, to getting chopped up from a stock that just isn't conforming to the typical patterns you're used to seeing, to having your stock blow up to the moon in front of you and you only catch 25 % of it or something because you are always afraid its about into reverse, but it doesn't.

The best Sim I've found is Trader Trainer app on the playstore. It's free and supplies daily charts of real historical stocks from the last 20 years. You can draw trend lines, use moving averages, and a short list of the most important widely used indicators. You can short or long, but it only gives you one stock at a time so you move your money in and out of just that one stock. If you don't like the stock you can just hit Next Stock, and it will give you a new one. The key to why this sim is so good is that it has a little Advance button that moves you forward one day at a time. You only trade off the close of each bar so it sometimes screws you and sometimes helps you, but it makes your decision making much easier. You start out with 25,000 of initial capital, and the goal is to learn and experiment to see how you can make money in the safest and most effective way. How do we define that? Great question young Skywalker!

Keeping a Trading Report Journal

Keeping a journal will accomplish much for you. First it will help you realize and remember every trade counts. As you log it each time you will see the importance of each decision you make. It will prevemt recklessness, increase your focus, and give you powerful feedback on recent changes in your trading. There are two stats to track above all else: maximum drawdown and profitability factor. Make a chart of both and each batch of trades will give another data point to your charts for each stat. It will be super motivating to see your stats improving as proof you are improving as a trader.

Maximum Drawdown

Maximum drawdown is how much you lose before you bring your account back to its next new high. So for example, in read an article that recommended keeping records for trades in batches of 10.   So let's say we start with 25,000.

0. 25000			
1. 24000			-1k
2. 23000	23/25	-8%.	-1k
3. 26000.			+3k
4. 26000			
5. 25,000.			-1k
6. 24,000	24/26	-7.7%.	-1k
7. 27,000.			+3k
8. 30,000.			+3k
9. 29000	29/30	-3.3%.	-1k
10. 31,000.			+2k

The max drawdown in this batch would be where we lost the biggest % from the previous high, so 8%.

Profitability Factor (R)

= Total Winnings $ / Total Losses $
11 / 5 = 2.2

So for this batch of 10 trades you have 2 numbers to record, one is a measure of safety or risk, and one is a measure of profits or reward. The key is to drive down your risk by being consistent and never taking large losses by taking undue risks or letting losers run. Keeping your drawdowns short and small is the key to trading. Maximum drawdown is the most important stat. Profitability factor shows you at least you are making money and you should aspire to achieve over a 1.5 ratio.

The other stats that are important are expectancy which is what your a average trade is and maximum adverse excursion.

So in our example:

Expectancy

Expectancy = avg loser x % of losing trades + avg winner x % of winning trades
= -1k *(.5) + (11\4)*(.4)
= -500 + 1,100
= 600 average trade
So you would expect to make $600 per trade
= total winnings / # trades

Maximum Adverse Excursion

This one is also very key. Its like unrealized drawdown. Say between trades 2 and 3 we were in a position for 120 bars because we couldn't get out at a small loss so we held but it didn't come back right a way instead moved against us to lose 10,000 before coming all the way back and letting us get out at a loss of only 1,000. Our adverse excursion on that trade was -10,000. If your increasing your profitability by taking big averse excuriosions its only a matter of time before you go bust.   Adverse excursions shouldn't last more than a few bars unless it's quite small.   We want to make sure you stick around man!