TRANSCRIPT

Technical analysis for options trading

Konstantin Vrandopulo: Hello, welcome everyone. My name is Konstantin Vrandopulo, I'm joined here today by my very good friend and colleague, Mr. Robert Kwon. We're both Trading Strategy Desk specialists, and I got to say, we're very excited to present on this topic of technical analysis for options trading idea generation, as we feel that, you know, it's certainly helpful in both strategy formulation, as well as risk management along the way of those strategies that you do put on.

Let me tell you a little bit about the Trading Strategy Desk relatively quickly. The goal of our team is to help you develop and implement more informed trading decisions, and how we do that is exactly through presentations just like this one that are larger in scope, and we do these daily virtual classroom sessions that are smaller in size, more hands on usually, between 30 and 150 clients, with a live Q&A, and that you can find on Fidelity.com/coaching. It gives us the ability, uh, to cater, you know, that particular topic that we're discussing to the sentiment that is in the marketplace, you know, in real-time and use some screenshare and examples in real-time as well.

So, moving on into the topic of the day, technical analysis for option trading planning, the agenda is pretty straightforward. What, you know, we as options traders should be considering in terms of technical analysis, and why we should be considering it in the first place. We're going to break down some key technical analysis concepts, and then jump into the strategies, um, for option trade idea generation that are going to be sprinkled sort of along the way, as we're covering these key concepts throughout the next hour.

So, the focus of the webinar today will be how to use technical analysis for options trades, that's how we'll spend the majority of the time. But before we begin, I want to remind everybody that technical analysis is just one approach to analyzing underlyings. There are two common methods that investors generally use to invest in securities. Fundamental analysis, which most of you in the audience are familiar with at this point, I would assume, and then there's technical analysis. So, we have a screenshot on this page here of a balance sheet. All right? A financial statement of a firm on the left, and the chart of price action on the right. Effectively, that's where, you know, they differentiate themselves is one, you're going to have to be crunching some numbers, and the other is just following price, and the substantiating volume behind it. Now as an investor, you should always use the method that you're most comfortable with that makes you more confident in a decision making, and we

hope that if you're already using fundamental analysis in your current trading process, then you would see the benefits of technical analysis throughout the presentation today. So, with that in mind, Robert, over to you to introduce the core concepts that we're gathered here today to discuss.

Robert Kwon: Yeah, thanks Konstantin, welcome everybody, this is Robert Kwon, so for those of you that attend our classes, you know that Konstantin and I personally, right, we heavily utilize technical analysis. And it's very beneficial, whether you're just investing or trading stock or ETFs, or options. Right? So, we're kind of starting in the same place. And what technical analysis studies is historical market data, and specifically volume and price, and of course mainly price. Because it doesn't matter why something's happening, more so what is happening, right? And how that might drive our future decisions. So, it focuses on the supply and demand dynamic that's expressed via stock prices. And when demand outweighs supply, or supply outweighs demand, that can push prices in one direction or the other. And these shifts in supply and demand, in terms of price and over time, form the charts that we look at. So, charts essentially demonstrate that information and economics, including human behavior, is already factored into the price by the marketplace and market participants. And technicians believe that chart patterns tend to repeat themselves over time.

But technical analysis does not try to predict the future, and I cannot emphasize this enough. Nothing on the chart will show you what's going to happen tomorrow. It only shows you what's happened up until today. So, traders who use technical analysis will formulate their outlook on what has already happened, and patterns they identify in charts, but they're going to base their subsequent, and I would argue more important, decisions, in reaction to future price movements. And this price movement in the future we call confirmation or failure. So, confirmation is future price action that supports the original premise. And of course, failure is price action that would invalidate it. We're going to look at some examples throughout this hour. All right? And we'll also introduce the concept of trend, support, and resistance, and breakouts.

So, it is important to remember that technical analysis has limits. And you may have heard this before, but technical analysis is more of an art, not a science. The charts do require interpretation, and patterns, trends, and indicators are never exactly precise. So as Konstantin pointed out, right, there is not correct technique. So, combining both fundamental and technical analysis can certainly help you with timing and risk. The advantage of technical analysis is for options trades, we need very specific numerical inputs to our outlook in

order to make the trading that an option trader requires, that maybe a stock investor may not. Okay? Investors, however, still susceptible to emotional reactions and cognitive biases. And I'm guilty of that myself. And Konstantin, we sometimes refer to this as seeing what you want to see in a chart. And if you have a predetermined bias, you might find yourself simply staring at that chart until you simply find a signal to act on when in truth, you had already made up your decision before you ever even began.

So, moving onto the next slide, you do have to cover some assumptions, because technical analysis is more than just looking at a chart. There is a kind of foundation to the process, so prices in freely traded markets are determined by supply and demand, price, discounts, everything. So, all information related to the security is already reflected in the price. You may have heard the phrase, "Price is proof," right, when speaking or hearing from a technical analyst, because in the end, that's the only thing that matters, right, is what's happening with the price. Now this is also an interesting statement, prices are non-random but not necessarily predictable. So that gets into the looking at the chart to anticipate what's going to happen. I like to think it's more to prepare for potential outcomes.

Trend. Prices have direction and sometimes tend to travel according to observable trends. This is one of the foundational concepts of technical analysis. And behavior and history in the marketplace will have a tendency to repeat itself, and as the old saying goes, history doesn't repeat, but it often rhymes. So, it's never going to be an exact template of exactly what to do, but perhaps there's similar price action or circumstances in the past that it can help us prepare for future situations. What do we got coming up right now? A big event that could affect the foreseeable future. And lastly, price patterns and their behavior are fractal, meaning we can see them and apply them in many different timeframes, whether that's intraday, daily, or even longer timeframes like weekly or monthly.

So, why should option traders utilize technical analysis? A lot of times, these go hand in hand. So, what we didn't mention, a very common third technique in options trading is statistics, or probability, right? So, you can use them in isolation, you can use them in combination, but technical analysis and options trading kind of go hand in hand, and many of the best practices for option trading come directly from technical concepts. We focus on price, and when it comes to options, we have many more decisions we have to make. We have to be much more specific. If you just trade stock, there's only one thing to trade. You can buy it, or you can short it. Or if you own it, you can sell it. With

options, we have to choose a strike price. Right? That's an important part of the trade process. We have to have a specific timeframe. Options have expiration dates, whereas stock does not expire.

So I kind of try to think of all the different options, like the calls and the puts, the different strike prices, the expirations, and then of course the many different combinations or strategies built from those individual options, the multi-leg ones, as basically different specific tools in a big toolbox. So, in order to pick the appropriate tool, we have to have a very specific outlook, and technical analysis can help us formulate that. In both positive future scenarios, and Konstantin I would argue, just as important, if not more important, what is the negative scenario in your play? And we'll get more into what I mean by that. It's basically, what does being wrong look like? So, it's critical, when you're an options trader, to choose the appropriate strategy given risk versus reward. Not just focusing on the reward aspect and focusing on the trade working. So, what does forecasting look like when you are correct, and what does it look like when you're wrong? In a lot of ways, it's like guessing the weather, right? If you guess it's going to be sunny outside, maybe in normal times, you might plan to do something outside, but what do you also have to forecast? What if you're wrong, and it's really bad outside, what's the change in plans? What's the contingency?

Konstantin Vrandopulo: All right Robert, very good. So, let's jump into the core concepts that we are set out to break down for you, ladies and gentlemen, today. It's going to be number one, trends, we'll talk about support resistance, hop into moving averages, or an indicator to identify trends. We're going to talk about some breakouts, and finally a volatility indicator, it's called the Bollinger Band.

Technical analysis is really based on the principles of trends. Trends obviously arise from interactions of buyers and sellers, and let's think about what it is that the, you know, what we're trying to do in the marketplace when we're engaging in buying and selling the activity. Well, the marketplace is an auction where all of us as market participants are actively deciding on what a fair price for an asset is in any given one moment in time. So, for every buyer, there is a seller.

Now let's think about what happens if prices go up. If prices go up, it doesn't mean that there is no one willing to sell, it means that the sellers are only willing to sell at incrementally higher prices. And buyers are willing to pay those higher prices. So, in that sort of a circumstance, buyers are in control, and the trend is up. Conversely, if prices go down, it doesn't mean that no

one is willing to buy. There are definitely buyers out there, but they're only willing to buy at incrementally lower prices, and the sellers are willing to accept those lower prices. So, for every seller, there is a buyer. But when something is going down in price, or down trending, sellers are in control. The textbook definition of trend, trends direction, is described by relative locations of peaks and troughs. We can stand back and look at a chart at a glance that could help us decide on whether something is trending higher or trending lower. We believe as technicians that profits can definitely be made, or easy profits, I should say, could be made, from trending prices.

Now everyone's probably heard in the audience the coveted key to success in trading of buying low and selling high, or buying lower and selling higher, if you are swinging from the long side on your positions. Or, right, if you're swinging from the short side, I want to sell high and buy low. You all heard of these coveted concepts, but that sort of trading requires that the security actually travels from one level to another, and that speaks directly to the fact that it's very hard to profit from an underlying that has a flat trend when you're trading just stocks, and exchange traded products. However, with options, for the lack of the better term, we get options. So, we'll talk about a few concepts of options strategy selection where you can actually benefit from trendless markets, or flat sideways markets.

So, let's cover some of the assumptions about trend. We tend to assume that trends continue, rather than reverse. This goes to the point that if something is up trending, it doesn't necessarily have to turn around right away and begin a trend in the opposite direction. If something is up trending with a lot of momentum, oftentimes it goes sideways for a little while, consolidates through time, consolidates some of those gains, and then continues its previous trend. Vice versa. If something is downward trending, you would see a similar type of activity. So, trends are influenced by the next longer or the next shorter trend, and what we mean by that is, we on the Strategy Desk call this phenomena seeing the forest for the trees. All right? So discerning sort of the bigger pattern from the mass of detail that you're seeing on the shorter time frequency. So, seeing the bigger picture. If the longer trend is up, that will most definitely influence and have some impact on the shorter-term trades and shorter timeframes.

Now Robert talked about the fact, of the fractal nature of trends. And trends are definitely fractal. That means that even though they occur over different time periods, like hourly, daily, weekly, monthly, the behavior is still the same. So, you often hear that past performance is no guarantee of future results, and I think that disclosure speaks directly to the complexity and the variability of

trends. They're not easily programmed and tested on computers, they're not mechanical methods that you could predict or identify.

So, moving into what sort of options strategies would be suitable for uptrends, downtrends, or sideways trends, before we jump in that, let's look at these three pictures here, three charts. So, an uptrend, higher highs and higher lows along the way, on the very left-hand side. One of the goals of a trend trader, of course, is to trade in the direction of that trend until the trend no longer appears to be intact. So, Rob talked about the fact that we're looking for the preponderance of evidence, the confirmation of the fact that that trend is over. The evidence of the fact that that trend is broken. So you shouldn't try to predict the end of a trend, but rather wait for the confirmation of changing in that trend, and the lack of higher highs and higher lows, and then change your stance of how you're going to be approaching the underlying. I like to think about it, Rob, in a way of it, you know, an underlying being innocent until proven guilty in an uptrend.

So, in a downtrend, this middle picture here. You're seeing lower highs, and lower lows. Again, we're not trying to predict the end of a trend, but rather going to be changing our stance if we're seeing confirmation of that fact that lower lows and lower highs are no longer the structure of the price action.

Sometimes, there's no up or down trends. We see markets from time to time that are moving sideways, price actions that move sideways, trendless markets or sideways trends are also called trading ranges. It's a period of time, effectively, where there is no clear direction in price movement. In other words, the battlegrounds between supply and demand, the battlegrounds between the buyers or sellers, are roughly equal and are very easily identifiable on the chart at specific levels, the concept of support and resistance, and we will cover that in detail in a few slides.

So, three types of trends we have to remember. Uptrend, downtrend, sideways trend, thinking about our timeframe, making sure that we're seeing the forest for the trees, zooming out, looking at a longer timeframe, and then starting to zoom in on shorter timeframes. Rob, this is a very important fact, obviously there are downtrends within uptrends. But what is the primary trend on the longer term is going to be the important factor of identification. Most importantly, connecting the troughs, the higher lows along the way, identifying the uptrend line, connecting the lower peaks along the way with a trend line, identifies a downtrend. So, let's talk about the options strategies for different market conditions that we just described here, Robert.

Robert Kwon: Yeah, KV. So, like I'm sure everybody's heard that catchy phrase, the trend is your friend, right? But the trend is only your friend, right, until signs show up that the trend may be ending, and you want to manage your trade accordingly. Nothing goes up forever, right? Or in a straight line, rather, right? So it can be a kind of rocky ride, even if we end up eventually in the upper right corner of your screen, which is definitely what you want if you're a longer term investor, but where the complexity lies with options trades, just because they have finite lives, the timing is essential. If you buy stock, as long as it eventually goes up, you will eventually make money. That's not the case if you pick a random bullish options strategy with a random expiration date. If the timing's wrong, the trade could be wrong.

So, if the underlying is in an uptrend, trading with the trend would mean you reach for the bullish bucket of options strategies, such as buying calls, selling puts, or bullish maybe spreads. Right? Bull call debit, bull call spreads, or credit bull put spreads. If the underlying is in a downtrend, you may consider using bearish options strategies like buying puts or selling calls. Or at least consider closing your bullish positions. So, trading against the trend is actually referred to as countertrend trading, and as Konstantin pointed out, a lot of times it involves what you might think is a downtrend, but in fact it's just a shorter term, right, perspective. So again, many uptrends don't move just

straight up, it's more of like a staircase type of price action, you can probably pull up any random chart and you might find price action like that.

And it's created by only in hindsight temporary pullbacks. So, if you place a bearish trade anticipating one of those pullbacks, or possibly actual trend reversal, you are trading counter to the trend you've identified, therefore if the trend continues or accelerates, what does being wrong look like? It could go way against you. So, you have to have a disciplined and defined exit strategy to manage that risk. So, countertrend trading can certainly be intentional. Like you can, you know exactly that's what you're trying to accomplish, but as Konstantin mentioned, oftentimes it just happens to traders who are basically kind of too zoomed in on their timeframe.

So for example, on a shorter timeframe of say one or two months, it may appear that we're in a downtrend, whereas if you zoomed out to a longer timeframe of say one or two years, perhaps you might have actually identified a different longer perspective of a primary uptrend, and perhaps this is simply a pullback within that uptrend, if prices recover. So, anticipating trend change actually has nicknames, and I'm sure some of you in the audience have heard of this, right? If you anticipate a downtrend reversing into an uptrend, what do we call that, KV? Try to catch the falling knife, right? And if you try to short

something, anticipating price rising is going to turn, we call that trying to stop the speeding train. So certainly, there are traders operating, right, on both sides of an individual option trade. You want to make sure you've identified what you're trying to accomplish, and the condition of price, are you trading with the trend, or are you in fact anticipating trend change, or a pullback within that primary trend?

And as Konstantin touched upon, if you think the stock's doing nothing, right, it's just going to basically fluctuate and end up in the same place, if you just trade or invest in stock, and you literally think nothing's going to happen, one thing you should do is not trade it, right? You don't -- if you're correct you don't benefit, right, outside of dividends, okay, it just locks up your capital. However, if you think it's going to be contained within a range, there are rangebound strategies like long condors, long butterflies, short iron condors, short iron butterflies, short strangles, short straddles, that again, for lack of a better term, give option traders more options for an outlook that a stock investor would simply move onto something else, or at least revisit it at a different time.

So, as we've seen in the prior slides, trend is basically direction. And a trend line is an attempt to find and use that direction, I'm very fond of trend lines

personally, because this is how I started, using a pencil and a ruler back on newspaper. So, it's very simple. It's a line that connects reversal points of similar magnitude and orientation. So, we connect them from trough to trough, rising in an uptrend underneath, and from peak to peak, declining above in a downtrend. So, in an uptrend, we're going to connect those rising troughs, valleys or dips in the price, whatever you want to call them. And in a downtrend, we connect the declining peaks or bounces. And then, trend lines are extended into the future. This is the way we utilize them. So obviously, you need at least two points, but you can certainly connect and fit more than two, but you need at least two for the slope. And we use them as potential future support and resistance levels that, if the price ever interacts with that level, depending on its response there, to quote, "confirm" if that trend is intact, or if it's in jeopardy of failure.

And of course, breaking that trend line is often a signal of potential direction change. After breaking a trend line though, as Konstantin touched upon, it doesn't necessarily mean an uptrend will immediately be turned into a downtrend, or a downtrend will immediately bounce and reverse to an uptrend, although there are many examples of that. It just simply means that the current trend is in jeopardy. And prices often will retest or return to the original level from the opposite direction, and this is the concept called price

retracement. Now we're going to look at this next concept as well in the demo, but one thing to make a note of is many traders will actually create boundary lines for uptrends. So upper boundary lines, and lower boundary lines for downtrends. But remember, when you're drawing just the trend line, it's underneath for an uptrend, and above for a downtrend.

So, I'm sure a lot of you heard of support and resistance, and this is simply the horizontal version of trend line. So, they occur at reversal points, and obviously they can again extend back and to the left, but more importantly, once again, it's going to be the extension right into the future. And what we're looking for is future reactions at these levels, if they ever are to occur in the future. So, if you ever heard the term, is support going to hold? Is resistance going to break? What it's referring to is price revisiting a past battleground area, basically between bulls and bears, and you're waiting to see what happens there. So, a breaking of these levels indicates that buyers and sellers, right, anticipating that level to hold, is now gone, and they shifted in favor of the other side. Right? That's the concept of breakouts we'll touch upon a little later.

So, option traders need a specific outlook on price, time to expiration, and volatility. There is no way around that, Konstantin, I've had many

conversations, as I can't decide what I think is going to happen, if that is the answer, the answer should be no trade. Right? We need very specific inputs to make the decision of which tool to grab in the toolbox. Support and resistance can be very helpful in forming an outlook, whether it's the horizontal version or the sloped version, right? You can use support and resistance to choose strike prices for either calls or puts, it can give you entry for a directional trade. If you're going to utilize a multileg strategy like a spread, if you think hey, I think this stock is going to go from this specific price, but only to this price, it can help you determine the legs of a multi-leg trade, like a vertical spread. And of course, if you think something's going to be rangebound between support and resistance bubbles, well that can be a very great way to decide on its strike prices to pick for a rangebound strategy.

But just as important, right, a failure of support or resistance, or the breakout, right, whether horizontal or sloping, that can help us trigger an exit strategy. And it can also help us determine which options strategy to choose, and potentially the position size we're comfortable with. And this really goes back to what does being wrong look like in our outlook?

So, for example KV, imagine you see price coming down maybe in a horizontal pattern, and you've seen it bounce there several times. And you wait to see if

it bounces again, and it does. That might trigger an entry for a bullish trade for maybe a round-trip back to at least the resistance level up top. What should trigger your exit? Very simple, the failure of that bounce with future price action. So, you can see here that we're not trying to guess that it's going to hold. We looked that it held, at least for the moment, that triggered our entry based off our expectation and outlook that if it's staying within the range, it might retest the opposite end of the range. But the future then presents us with a different scenario where that initial bounce fails, our trigger is reversed, what should that do? It should trigger the more important decision of de-risking, or closing your now incorrect trade.

Konstantin Vrandopulo: So, Robert, you're pointing out not only the importance of entry, but also the importance of exit. So effectively the preponderance of evidence, the confirmation of either I placed the right -- I made the right assumption, and the trade is starting to work, or the price moves adversely to what you were expecting, and you have, you know, a specific scenario for an exit as well. So great way to sum this up, again, if you were entering based on technical analysis into an options trade, if that signal or your thesis is invalidated, you should obviously be exiting as well. That keeps you true to your, to your original assumption, keeps you honest, and gives you the ability to close, remember that's what differentiates traders from gamblers, is that as

traders, we always reserve the right to change our mind. We have the ability to risk manage along the way.

So, our next concept is moving averages. Indicators designed to detect the start, the continuation, and the reversal of trends. We're going to talk about simple moving averages today, and simple moving averages are just that, they're simple. They give equal weight to each period in observance. So, let's talk about what do I mean by that? Well, moving averages are one of the core indicators, in my view, in technical analysis, and there is a variety of different versions that Fidelity offers. We're going to focus on the simplest one here today, it's the one that I see a lot of traders use, I've seen, I've talked to a lot of technicians in my lifetime, and I can tell you that it's probably the most frequently and often used moving average type. So, how is it constructed? Well, it's simply the average price over a specified period. Why is called moving? Well, it's moving because it's plotted on the chart bar by bar. And it's forming a line, moves alongside with price action, as new price values are being implemented into the calculation, into the numerator, and divided by the denominator of the periods that, in observance, it keeps either moving up or down, or moving sideways along the way. So, it's a moving average. It has two parameters, price and the length of that average. We're giving equal weighting to each and every bar, each closing price on the chart, so let me talk

about what I mean there. Well, let's say that we're looking at a daily frequency chart. And I am looking at a 20 simple moving average. Well I'm taking 20-days' worth of closing prices from that chart, adding them all up in the numerator, and then dividing it by 20.

Now if the simple moving average is moving up, or it has a positive slope, the trend is up. If their simple moving average is moving down, or it has a negative slope, the trend is down. And Robert, a moving average can also be useful in scenarios where, that we have been seeing a lot of, especially this year, where maybe the trend line technique of connecting the peaks and troughs has to be constantly adjusted, because the momentum in the stock, and the momentum of that trend, is readjusting, accelerating, or decelerate. So situations where you cannot actually use, kind of think about it from the mathematical standpoint of view, where you can't use a linear equation to solve for a slope of the trend, where prices go parabolic, and we have to maybe use a quadratic equation to solve for a slope. The simple moving average could really be useful in those types of circumstances.

So, what we generally tend to do is we apply simple moving averages for different timeframes. Some of the commonly used ones are 200 period simple moving averages. So, proxies for longer term trends. When we look generally

at the 200 period SMA, we're thinking about on the daily frequency, 200 days' worth of trading. That's your lookback period. Could be looking at a shorter timeframe, right? A 50-day. Or 20-day, an approximate one-month lookback period. Robert and I are big fans of the 5-day simple moving average that tell us the, kind of the trend of what's been playing out over the past one trading week as well, for that very short timeframe.

So, using combinations of these moving averages on your chart is going to be very useful. We'll look at not just the moving average in and of itself, is it sloping up, is it sloping down? But we'll look for price interactions with that simply moving average, and the potential trade signal. Price crossing above the SMA is triggering maybe a long idea, a long trade idea, price crossing below a simple moving average might trigger a sell or sell short type of an idea.

So, prices in relation to moving averages, is it above or below the moving average in observance? How important is this? So, on this slide here, we have an example of different timeframes for that moving average calculation, specifically a comparison of the 20, a 30, a 40, and a 50. So, you could see that relatively speaking, they all have similar slopes. But they react to price action differently. The shorter dated one, the shortest period one, is going to be

reacting the quickest, the longer dated ones are going to be reacting slower. So, price moving above a moving average would be considered maybe a bullish type of a setup. And a price crossing below a simple moving average might be looking for -- you might be looking for a bearish type of a setup.

Now most importantly Robert, like we talked about before, we're not using technical analysis for predictive purposes. So, let's think about what a moving average is incorporating into its calculation. Well, it's incorporating historical price action, and that's it. So, moving averages do not, by themselves, anticipate reversals. They confirm reversals that have taken place. Why? Well because like I said, moving averages are based on historical price action, and there's nothing predictive in the formula about what future prices might look like. So as technical traders, we're using moving averages to again, react to what the price is doing, rather than predict what it's going to do.

Shorter term moving averages are, like I mentioned earlier, more sensitive to changes in prices, and indicate trend reversals more quickly. Of course, because they're more sensitive, they can bring about more full signals. We're looking at this chart here on the left-hand side, we have sideways action in the stock, kind of a trend list type of a move. Up and down, but in a very tight range. We see the moving averages are flat right through it, and the price is

basically interacting with that moving average, not really respecting it as a relative level of support and resistance, but crisscrossing it back and forth, until price actually starts to trend. Maybe a breakout from a sideways consolidation, a breakout through the resistance point, and then the price starts to trend and respect the moving average as a relative level of support along its trajectory to the upside.

Now we have a red circle right there in the middle, and that's telling us the moving average, the slower moving average, is being crossed through from overhead by the shorter dated one, and that obviously is a bearish signal. Again, confirmation of the fact that the prior uptrend is now broken and is no longer intact.

Technical analysis is one of these things that, you know, we frequently not only pay attention to the trend lines themselves by connecting the peaks and troughs, but we're looking for confluences of evidence that a particular thought or thesis is actually playing out in real-time. So, Robert, over to you to talk to us about breakouts, or briefly mention breakouts from support resistance, and what it brings about with it.

Robert Kwon: Yeah, so a breakout is, you know, basically when we're referring, you know, if that trend line of support resistance, you know, level or zone, you know, is potentially broken. It's exceeded up or down. So, it can signify that, you know, a change in buyer and seller behavior is occurring, and thus is often an early signal of a trend beginning or ending. Trend line breakouts can signal trend endings, support or resistance breakouts can signal trend beginnings. And many trading methods are based on a breakout strategy. Keep in mind, you know, breakouts can fail and reverse back into the previous pattern or level, and even successful breakouts may retest the breakout level before continuing on, and these are -- you might have heard these terms -- throwbacks and pullbacks. Okay, so you want to be mindful of are we at an area where it can hold or break? So, looking at the next slide, take a look at this diagram, here we have a breakout signifies that a change in buyer and seller behavior is occurring, and thus it's often an early signal of a trend beginning or ending. We've seen many instances of this. Former resistance, price fails to break on the first attempt. There is a retracement, but it gathers itself and is able to surpass it once it breaks, that is the breakout. Now the example of the retest is if the extension to the upper right of this diagram were to come back down, a confirmation of the breakout is we would expect it to hold that former resistance level as now a potential support level. If it were to

come back down and fall back through that resistance, that would be the failed breakout.

So, trading options with breakouts is really not much different than trading stock or ETF breakouts, traders are going to look for that confirmation, and use an appropriate options strategy for the direction of the break. If you have a breakout to the upside, you might use a bullish strategy, such as buying calls or selling puts. A break to the downside, you might use a bearish strategy such as buying puts or selling calls. But more importantly, Konstantin, this gets to: Are you somebody who always reaches for the same tool in the toolbox? So, imagine you're somebody who typically sells puts, and you're always looking for an opportunity to sell puts. If you expect and see the explosive upside, what don't you get rewarded for if you sell puts? You can't hit the home run potential if you're right. You can -- you might sell a premium for a nice premium, you might like that, but that's all you can make.

But on the flipside, imagine you're entering a short put position at a support level, we talked about this earlier, where being right means that bounces back or breaks through, but being wrong could potentially what? A reversal back or a breakout down, what's the risk of selling puts? If the person who bought the put needs to cash in, you're the one that has to potentially pay for it. So you

want to understand if that's the situation you're in, manage position size, manage risk, disciplined exit strategy, or potentially consider a defined risk trade, like a bull put spread, instead of just a cash-covered or naked put.

Konstantin Vrandopulo: All right Robert, so we're going to start building on the trend indicator, the moving average concept. We're going to talk about Bollinger Bands, the final technical analysis concept for today. It is a type of a price envelope that is going to be oscillating around by default a 20-day simple moving average. So, what it does is, it looks at the price activity over the past 20 trading sessions, and it adds a two standard deviation envelope above and below that 20-day simple moving average discussed earlier. Of course, on a daily frequency, that 20 period SMA is going to represent around 4 trading weeks' worth of action. Bollinger Bands help us determine whether prices are high or low on a relative basis, because that two standard deviation envelope tries to price in, based on what has happened in the past, 95 percent of occurrences of what already happened. When the bands tighten during a period of low volatility, that could potentially raise the likelihood of a sharp move in either direction, up or down. So, we talked about the concept of horizontal support and resistance, sideways markets, rangebound trading. Imagine a scenario where you have rangebound trading up and down against very visible levels of support or resistance, and you get a breakout with an

expanding Bollinger Band envelope. That is effectively confirming the fact that the prior sideways trend, or trendless market, is over, and a new trend is potentially beginning.

So, when bands separate an unusually large amount of volatility, or you know, and unusual amount of volatility kind of comes into the market, or increases, might actually signify that the existing trend is probably ending. So, we've talked about, you know, one of the examples from a breakout from a trendless market, either to the upside or the downside, but imagine that you were in an uptrend, and you start seeing Bollinger bands expansion. Well that trend potentially might be coming to an end. Downtrend with Bollinger band expansion. Trend potentially might be coming to an end, that downtrend potentially might be coming to an end.

So prices have the tendency, of course, you know, along the way, to bounce between the bands, touching the upper and the lower, you can use these swings to help you identify potential profit targets, strike price selection that we've talked about, especially in sideways markets. We need to understand that prices don't have to stay within these bands, obviously this is just two standard deviations, and so prices can exceed or hug a band for a long period of time during strong trends. And Robert, this is one of the common

misconceptions about well, you see the price is touching the top of the envelope, so it must reverse, and it must come down. Or, the price is touching the bottom side of the envelope, so therefore must reverse, and it must come up. Robert, we talked about trends, we talked about momentum within those trends, and we've talked about the fact that trends, generally speaking, tend to continue instead of reverse right away. So, this speaks directly to the fact that a lot of people are actually misusing Bollinger bands, first and foremost, what is going to be important is the identification of trend and price. Price is truth.

So, let's look at this example here of bands narrowing down below in the left quadrant of this chart, sideways action oscillating between two levels, and then we break out through the level of resistance. What happens to the Bollinger bands? Well they expand. They confirm the fact the breakout is in play, and a new trend is beginning. When that new trend is intact, notice what happens, we're trending higher, with higher highs, and higher lows, and we're hugging the top boundary of that envelope along the way. And on pullbacks, the 20-day simple moving average, that middle line there, acts as a relative level of support. Again, building on the core concepts that we've already learned, identifying trends, and then looking at historical price action, and measuring the volatility within that trend through the prism of Bollinger bands.

When using options strategies or thinking about putting on options strategies, we have to remember that we don't trade the past, we are trading the future. So we have this whole new concept of implied volatility that comes to us from the options markets, but we can be looking at historical volatility and trying to decide on what types of options strategies might potentially be beneficial if volatility is high, that is probably a sign of the fact that options are, relatively speaking, expensive, and the volatility is low, based on, you know, what the stock has done historically, that probably is a sign that option premiums might be cheap. But again, we have to look at implied volatility, because that's what we're trading. This is just kind of a preface for that. So, Robert, let's hop into the screenshare portion, just show everybody how we could add some of these indicators to a chart, and wrap it up.

Robert Kwon: Yeah, give me a moment to get this started here. So, let's see here. Yeah, so while that takes a minute to load, so some best practices, right? Do not have a preconceived notion of the trade, right? And this can help reduce your bias in your analysis. You want to identify a specific outlook of price, timeframe, and volatility, basically are prices trending up, down, sideways, and then you want to select the appropriate strategy, and then most importantly, not just your entry, but your exit criteria. So, this is the S&P. And this is the two-year view. So, we can see where we came from, let's apply the

techniques, let's go back to, obviously everybody knows what happened in the beginning of the year, right? And we can just use, starting with trend lines, here's a very -- see the small box? Right, I like to call them baseballs versus baseball bats, as far as the charts, right? (laughs) And you can see here that we are in this low volatility uptrend in growth, but it didn't turn into a downtrend, it just started angling up on a different trajectory. Right? This is what we were talking about, and then we have these different, right, uptrends. This one finally broke here, it was in jeopardy in this middle part here, and then obviously we know what the trigger was.

So, on the way down, a very sharp downtrend. That trend broke, but it didn't go back up, this is the concept of a flag, which is a, basically a countertrend pattern that typically breaks the primary trend, but ends up continuing along, but what do we find? We just went along the outside via the initial trend line, so we're just using this same technique from the different, right, perspective, and look how well this trend line held on this move. It broke, what was different about this break? This pullback here, let me identify it with a vertical line, its pullback, unlike this one over here, did not take out the prior low. So, this had a chance, and now we can flip our signals here. This sharp retrace, what happened? It broke. Was it a downtrend? No, we just started angling up along the different trajectory, and you can use the same concept, you can

see it went to a, kind of a sideways pattern for a while. And then, now we can focus on this horizontal level right here. So, this is the concept of the breakout, when we're in this sideways chop right here, see how powerful the breakout was, what put it in jeopardy? This was a couple of Fed meetings that happened suddenly, and this kind of went into a sideways pattern on its own.

And then where are we now? Here's the uptrend, look at this most recent price action though. Right here, so we're kind of trapped in this range. In addition, when we fell through, kind of trapped in this little sideways range (inaudible) when we reached the bottom, flushed really quick to the bottom, we took it, and we got to the top of it, powerful move higher, but it fell short and now, in the shorter term, we're in this shorter term decline that has reentered this pattern, it tried to hold outside of there for several days. And just really quick, I want to be mindful of the time, here's the concept of using the moving averages. So we'll use the default 20-day, which is roughly one month of trading, and then as Konstantin mentioned, if you're a shorter term trader, you may consider using a faster, like a one-week or a 5-day, and you can see here, we call these moving trend lines. In concept, it's doing something very similar, just drawing the trend line, it's keeping you on the right side of the momentum, and if you trade against that, you're basically countertrend trading, just be aware of what you're doing. When it's trending

strong, what does it typically not do? It doesn't challenge our faster moving average. Right? And you can see when the faster moving average is in jeopardy, then we might look at our secondary slower ones for a different perspective.

What are we doing here? We are going back and finding all the moving averages are crisscrossing with each other, what's different? See how it's sloping downward over here, sloping upward over here, so what is the price and the moving average telling us right here? There's no clear trend from the 5 and 20 simply moving average perspective. And then very quickly, here is the volatility perspective with the Bollinger band, you can see that when the trend is very strong, it can push the bands, but if you get a momentum or price reversal at an extended period, sometimes it can snap back at that mathematical perspective, but as you can see, when we came out of this sideways compression, it pressed higher for an extended period, but when it did decide to turn, just keep in mind from a mathematical level, it can cause these snapbacks.

If you're interested in this type of analysis, we'll be having an online class, and we'll be back at the market close in our aftermarket session Monday through Thursday, do a lot of technical analysis. Hopefully this was a valuable use of

your time and gives you more specific ways to frame that outlook, knowing that this chart will never tell us what the next part is going to be, but it will help us prepare for it.

Konstantin Vrandopulo: Excellent Robert, thank you so much. That concludes the official part of our presentation today.

END OF AUDIO FILE

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