# Technical analysis for options trading

**Collin Songer:**

Thank you everyone for sharing your day with us here today. We're going to be focusing on technical analysis for options trading. My name is Collin Songer along with my colleague Brian from the trading strategy desk here at Fidelity. Before we get started, we do want to cover a few disclosures. Option trading entails significant risks and is not appropriate for all investors. Before trading options, please read the characteristics and risks as standardized options. Examples from this presentation do not include transaction costs, things like commissions, margin interest, fees, or even tax implications, but they should be considered prior to entering into any transactions. The information in this presentation, including examples using actual securities and price data, is strictly for illustrative and educational purposes only. This is not to be construed as an endorsement or recommendation. Technical analysis focuses on market actions, specifically volume and price. Technical analysis is only one approach to analyzing stocks. When considering which stocks to buy or sell, you should use the approach that you're most comfortable with. As with all your investments, you must make your own determination as to whether an investment in any particular security or securities is right for you based on your investment objectives, risk tolerance, and financial situation. Past performance is no guarantee of future results.

I'm going to allow Brian to introduce himself and go over some of the goals that we're looking to accomplish today.

**Brian Isabelle:**

Good morning, good afternoon, everyone. My name's Brian Isabelle, also from Fidelity's trading strategy desk and I thank you all for coming and spending this time with us today. We're going to be talking about technical analysis and, specifically, today what we want to highlight is how you can use certain aspects of technical analysis when planning your options trade and not just planning your entries, but also planning your exits. The way we'll do this is we're going to talk about various subjects including support and resistance; trading with the trend, talking about what is a trend and how to you trade with it; we'll talk about using moving averages; we're going to talk about the concept of a breakout, what is it and how does one use it.

We will also talk about Bollinger Bands, a specific indicator that many option traders find to be useful. Also, as we go throughout today, we'll be discussing using technical analysis signals to help plan your exit strategies. If you've attended any of our webinars in the past, you know that we do stress that one of the most important things as a trader is to have an exit strategy. As we go through each of the topics that we just discussed today, we'll talk about how you can use those various tools not just to get into trades or determine which type of a trade you want to be in, but also how you can use it to plan your exit strategy because it is so important. That's what we're going to be talking about today. This, of course, is not going to be completely comprehensive of all technical analysis topics, but we will talk about some of the more important aspects of technical analysis today, specifically for those of you who do trade options.

The first topic that we want to talk about is support and resistance. Collin, why don't you talk to us a little bit more about what exactly is support and resistance? Then, let's talk about how an option trader can use this concept.

**Collin Songer:**

When we discuss support and resistance, first let’s talk about what is it.  Support and resistance levels occur at reversal points.  Reversal points are where buyers and sellers are evenly matched and neither is dominant.  Support and resistance levels are shown on the chart with typically a horizontal line extended in the past and in the future.  Prices tend to stop at these levels in the future and --

**Brian Isabelle:**

That’s why we draw the line into the future, right Collin?  The whole point of drawing the line into the future is because these areas are areas of significance and they persist into the future.  It’s important when you do find or identify a support or resistance level to extend that level into the future so that you’re aware of it.  When that time comes up, you’ll be aware or when time goes by, you’ll be aware of that price level.

**Collin Songer:**

The reason for the past is see where you can see those reversals in the past.  How many times did it hit off that level in the past, given us more confidence or less confidence in those particular levels?

**Brian Isabelle:**

It’s cumulative.  If you think about it, if you’ve seen price turn around -- that’s really what we’re talking about, spots on a chart where you see the price turning around and if you see a series of peaks -- let’s say you were looking at a chart and you see 10 is a spot where the price keeps turning around.  The more times it turns around at that level, the stronger that support or resistance is; the less times, the less strength it has so the less significance it has.

**Collin Songer:**

We’ll go over a chart in just a moment, that way you can see a live example of that and that way Brian can show us exactly what are we looking for on a chart, a real-life example.  On the other side of that which is very interesting is breaking these levels implies that buyers and sellers are holding that price as support or resistance levels are now gone.  This can also be another way of indication of either entering into a trade or admitting that we were wrong for using that as the basis of our trade, that the support resistance was going to hold.  You can see how you could use it as a way to find opportunities, new opportunities, or a way to get out of current opportunities that we’re in. I projected that those levels are going to hold. As you can see, entry as well as -- as Brian indicated -- exit.

We’re going to be through an example here. Before we do so, I do want to give a basic fundamental on the option trading aspect. Whenever you’re going into an option trade, one of the three pillars that we’re going to be focusing on mainly is going to be an outlook on the price direction of the underlying and we’re going to show you a few ways based on support resistance here today, but also another two are time frame and you need to have an outlook on volatility. We actually do touch on that near the end, but these are the three pillars that you want to have an outlook on going into any option trade. Let’s take a look at an actual chart example to see how what support and resistance could potentially look like.

On this example that we have here on this slide, we have used Recognia’s technical analysis support and resistance on a chart in Active Trader Pro. The good news here is if you are new to technical analysis and you’re not comfortable drawing your own support and resistance levels or identifying your own support and resistance levels, we do have a tool on the advanced chart on fidelity.com and in Active Trader Pro charting which you can click on if you go to technical analysis and then click on support and resistance. It will draw the line for you. The nice thing is you do have the ability to adjust it for the short, intermediate, or long term. Some of them may all be the same and you may have the same support and resistance levels for one or more of those time frames, but it does give you that option so you can see different support and resistance levels. If you look at the chart here, the green line across the top, that is considered a resistance level. Notice when the price gets up to that green line, it tends to have difficulty going above it and it turns around and comes back down. As it goes back down, it gets to the red line which is a support level. That horizontal red line is a support level. The price gets down to it, turns around, has a hard time going below it, turns around and comes back up. Keep in mind, as well, we're going to talk in a little bit about breakouts. Breakouts are what occurs when these support and resistance levels don't hold. But, our tendency is to expect that a support or a resistance level will hold, especially if it is proven to be extremely strong in the past. The more time it has held support or resistance, the more strength it has, so to speak.

How do I use this as an option trader? It can help you choose your strike prices on your calls or your puts. It can give you an entry point for a directional trade so if you do see it -- we're going to talk about breakouts -- but if you see the support or resistance level broken, now you may say hey, resistance has been broken. This is going off to the moon. Now, we're going to make a bullish trade out of this or, conversely, if it breaks down below that support, you might think, "Now, I'm bearish. This is going down. I'm going to try to play that direction." That's how support and resistance can help from a directional perspective. From a strike price perspective, it gives you a starting point, so to speak. With options, obviously there are many different strike prices that you can choose depending on the underlying. This can be a spot where you can start to look hey, if it goes above here, maybe I want to choose my strike price based on that support level or that resistance level. Additionally, and this is a very common one that we see, is using that support and resistance level to determine the legs of a multi-leg trade. One of the more common things that we'll see is people will use support and resistance levels for something like an iron condor, a trade where people expect the underlying to stay range bound and they'll use the support and resistance levels for the levels that they expect the price to be bound within so the middle strike zone, the iron condor so to speak.

Those are a couple of the different ways. We're laying a foundation right now of what this idea is of support and resistance because we are going to talk a lot about breakouts in a little bit and quite frequently, breakouts occur from support and resistance levels. Brian brings up a really good point. The idea of the underlying staying range bound in a particular area and then OK, I'm going to go out and sell -- just as an example -- an iron condor because you think it's going to stay between. What if it breaks that support and resistance? This allows us if my whole reason for the trade is that it's going to stay between, if it breaks out of that, I'm wrong and I should get out of the trade. It's based on it staying in. When it breaks out of that range, I'm wrong. There's nothing wrong about being wrong which our job is to manage our risk. It's trying to admit that we're wrong as soon as possible so you don't lose a lot more on that particular trade and that's why having these outlooks becomes very crucial.

**Brian Isabelle:**

Once again, exit strategy. If it breaks a support or resistance level that you were expecting to hold, that can be part of your exit strategy that if it breaks, I got to get out. That's the idea. Typically, when we talk about support and resistance and the horizontal levels, that is really a range-bound, sideways event that we're talking about. There is another way to find support and resistance levels and work a couple other ways, but we'll talk about those in just a minute. One of the most important things in technical analysis is the idea, the concept of trend and trend itself. Collin, why don't you talk to us a little bit more about what is a trend, why is this such an important concept?

**Collin Songer:**

When we discuss about trend, the importance of it, technical analysis is based on one major principal, trend. Trends arise in the interaction of buyers and sellers. The more aggressive the one is over the other, the steeper that trend. A profit is made from a trend in prices and trend's direction is described by the relative location of peaks and troughs. Let's take a look over to the right. Here's a few chart examples showing exactly what it means by that. We're looking to the relationship of peaks and troughs. Notice when those peaks go higher and those troughs go higher. That’s that top chart there. It’s an uptrend, right? It’s moving upwards. Is it fluctuating on its way up? Yeah, absolutely, but it still makes successive highs and higher lows. Let’s look down below that, down trend. This is where it’s making lower peaks and lower lows and it makes its way continuously down. Oscillating along the way? Yes, but in essence, it’s making lower highs and lower lows so those are probably the two most popular ones. This third one is overlooked all the time which is no trend or sideways trend, whatever way you want to look at it. That’s when you look at these peaks and troughs, it doesn’t seem to really identify as higher highs and higher lows. It seems to be staying in a particular neighborhood in terms. These are ways that it can help formulate your price outlook based on these types of events. We’re going to go more in depth with that and explore this idea further.

**Brian Isabelle:**

One of the things I like to remind people is technical analysis doesn’t have to be super complicated. Collin can just tell you a moment ago that an uptrend is higher highs and higher lows. A down trend is technically lower lows and lower highs. But, I like to make a joke but it’s not really a joke. It’s the truth.

I often tell people that my 11-year-old son can tell me if something's in an uptrend or a down trend. He's not a technical analyst. You just look at the chart. If it's moving from the lower left to the upper right, it's an uptrend. If it's moving from the upper left to the lower right, it's in a down trend. If you can't decide if it's one of those or the other one, it's likely not in a trend. It's moving sideways or it's in consolidation or a no trend, whatever title you want to give it. You don't have to overly complicate it. It can be simple. Is it moving up or is it moving down? It's that easy. I know we give it a name, it's a trend, it's an uptrend, it's a down trend, but that's all we're looking at, right? If you've ever been in a meeting with a sales group and they said, "Our profits are soaring because we have an uptrend in our sales," you look at that chart. You innately know if it's an uptrend or a down trend. It's the same thing with stock charts. It's the same concepts that we're looking at.

One thing I want to point out before we move to how you can use this, I said just a moment ago that we were using support and resistance horizontally. You can also use the trend to give you additional types of support and resistance. If we look at that uptrend, if we connect those yellow circles on the bottom, we connect a line going through those higher lows, that will also give us a support level. Conversely, if we were to draw a line on the yellow circles from the higher lows -- excuse me, the lower highs on the downtrend so the second chart that you see there, if you were to draw a line connecting those peaks that are declining, that would give you a resistance level so if the price were to continue to keep dropping and then turn around and start coming back up, it would tend to have difficulty going above that trend line. When you hear people talk about trend lines, that's all they're talking about. If you're in a down trend, you connect the peaks and you make a line. If you're in an uptrend, you connect the troughs and you make a line. That's really all it is and it does provide support and resistance.

**Collin Songer:**

When we're taking a look at these charts, I know this is a pitfall that a lot of people, the people who contact our desk, tend to overlook is sometimes, it's worthwhile to take a few moments and look at a longer time frame. Even if it's a shorter trade, it might be worthwhile to get a bigger picture there so Brian says this all the time and I think it's very insightful which is in just a few seconds, you can take a look at a longer term chart, an intermediate chart, and a short-term chart to help get a better picture of what's going on, but unfortunately, the majority of people just don't take those extra steps. They overlook them so take that moment. We have the technology to expand those charts in near seconds to look at a longer-term chart in the intermediate and shorter term.

**Brian Isabelle:**

When we talk about this idea of trend, you've probably heard the old Wall Street canard "the trend is your friend". There's a reason why you've heard that because the trend is such an important factor that we want to trade with the trend, we don't want to trade against the trend. It's just making your life harder. You want to trade with the trend. That's why it's important to identify what type of a trend you're in. If you're in an uptrend, you're going to use bullish strategies. If you're in a down trend, you want to use bearish strategies. That's going with the trend. As Collin mentioned, there's various time frames for trends. There's short-term trends, intermediate trends, and long-term trends and each of them has an effect upon the other. If you are in a long-term uptrend, short and intermediate trends will generally be longer to the upside as opposed to the downside and vice versa for long-term down trend. Those intermediate and short-term reversals are not going to be as long lived as that longer-term trend. That's why it's important to take a look at all of the different time frames as Collin mentioned.

These days, it's very easy to click a one-year, two-year, five-year, ten-year chart. It just literally takes a second to click it and see so be aware of where you are in the trend and one of the primary things that I would like to tell people is when you're doing technical analysis, you're not trying to predict the future. This is not a way to predict what's going to happen. The reason you do technical analysis is to react and your reaction is based on changes in the trend. What we're doing when we use technical analysis is look for any signs that a trend may be ending. Often times, things like that support or resistance being broken or if we draw a trend line and that is broken, those are hints that that trend might be ending. That goes through not only an entry but also an exit strategy. If you are looking at a chart, you think something is an uptrend, and you take a bullish strategy -- bullish strategies with options, you could buy calls or you could sell puts and then you're watching said chart. You're happy go lucky, everything's going great, keeps going up. But, all of a sudden, you start seeing signs that that trend may be over. Maybe, the support is getting broken, trend line is being broken. Both of those are happening at the same time, that's where it can be part of your exit strategy. You can say, "You know what? This uptrend, it's maybe not going down, maybe it's going to go sideways, but the uptrend which is where I can profit may now be over. That can be part of my exit strategy."

The same thing, if something's moving to the downside, if you're trying to make a bullish play with options, you can sell calls or you can buy puts and if you are in a down trend and you start seeing cracks in that trend i.e. see the trend line being broken to the upside or you see a horizontal support or resistance level or I should say you see a resistance level being broken and now starting to make new highs, that's once again part of that exit strategy. You can use the trend to get into your trade because it can help you identify if you want to be bullish or bearish, but it also can help you to determine when you need to get out of a trade.

Those were up trends and down trends, what about if you're in a sideways trend? That's one of the wonderful things about options. If you think about a stock, you can trade bullish and you can trade bearish and that's it. If you think the stock's not going to do anything, you're just going to walk away from it. On the other hand, if you're using options, you can trade an outlook where you believe that the stock is going to continue to just move sideways. With that, you're usually going to be looking for something that is in a range. It's bound within a range. If you remember back just a few moments ago, we talked about the idea of an iron condor, selling an iron condor because you believe something is going to stay in the range, same situation here. You believe it's going to stay in a range, maybe you're looking at condors, butterflies, strangles, or straddles, these multi-legs, trying to take advantage of your expectation that it's going to continue to move sideways.

Last point, can't stress this enough. I know I've said it a couple times, but always be aware of signs that a trend may be ending and manage risk in your trades accordingly. Really, that's what we're trying to do with technical analysis. If the trend is changing, time to reevaluate what strategies you have and if it's worth still being in those strategies, once again, exit strategy.

**Collin Songer:**

This is a really important point. Hopefully, this is sinking in about managing the risk. A lot of the examples that Brian’s been using are very specific levels that we’re looking at and the idea when we’re trying to get out of our exit strategies, just be as specific as possible. The reason for that is so -- and this is common across traders that I speak with as well as myself, I’ve noticed it which is whenever my emotions creep into my trades, the decisions don’t go as well. This allows you to be disciplined and allow your emotions to stay out of trading. Keep your trades logical and rational through the outlooks that we create because in essence, this allows us to manage the risk of our trades in that logical manner. If emotions play a role, that will typically cost you money.

**Brian Isabelle:**

It can help you to mechanize the process so to speak, taking that emotion out of it. Keep this in mind. That’s why these tools can be useful. They can put a concrete number on your trade exit strategy. Speaking of concrete numbers, there’s another trend concept that we want to talk about that is also extremely important and it ties back into the first two concepts that we talked about: support and resistance and trend. There is a set of indicators that can help us not only identify trend, but also give us support and resistance levels. Collin, why don’t you tell us a little bit more about moving averages, what they are and how we can use them?

**Collin Songer:**

Moving averages are a trend indicator designed to detect the start, continuation, and reversal of a trend. I find it interesting, perfect segway by Brian I might say which is we talked about the horizontal line for support and resistance; we talked about the angled lines so below the troughs for an uptrend and on the peaks for a down trend as resistance; this is the other concept, the curved support and resistance. That’s what we’re talking about, the moving averages. We’re going to show you how it can do that for us. Simple moving averages quite simply give you the equal weight to each period.

**Brian Isabelle:**

They literally take the price action from a set of time that you choose so if you choose a 20-day moving average, it takes the price of all 20 days, adds it up, divides it by 20. It’s that simple and then it plots it every day on the chart.

**Collin Songer:**

Now, we have the exponential moving average. I would say the simple moving average is probably the most common that you'll see across the mass media that's out there. If you see on the business shows that are out there, they usually will reference the simple moving average, typically. Exponential moving average will give more mathematical weight to the more recent data. Instead of doing as Brian stated with the simple moving average, it actually is going to multiply the more recent data, have more weight, and the one that falls off is going to have less of an impact. Why? Because it doesn't have that multiplier effect to it so it just simply falls off. It has less impact on the moving average itself.

Moving averages do not anticipate reversals. I know it's a common theme, but we want to make sure to hammer this home. They merely confirm after the actual reversal has taken place since they are based on historical data. Once again, it's not predicting the future; it's helping us react to what we're seeing from price action. Shorter term moving averages are more sensitive to changes in price and indicate trend reversals more quickly; however, short-term moving averages also generate more false signals which would make sense, more data showing that it becomes less what I would like to call noisy. It makes, for us, something out of a stronger signal, a little bit more confidence in that.

Technical analysis traders will often use combination of moving averages to help manage false signals and to confirm reversals through one or more crossovers.  We're going to be going over in just one moment and we're going to be showing an example of this concept of crossovers.

**Brian Isabelle:**

Before we take a look -- and I know it's harder to conceptualize this in your head and we've got out -- Colin, I want you to advance and take a look at the next slide.  Keep in mind what we're looking at.  The idea of moving averages, the faster the moving average, the good news is the faster you're going to get signals; the bad news, more often, those signals will be false signals.  A slow-moving average, the good news is most of the signals will be good signals; the bad news, it's going to take a while for you to get them.  It's just like everything in life. There's always a tradeoff, there's some good that goes with the bad so often times what technical analysts will do to help compensate for this knowledge is use multiple different moving averages so not only will they have a fast one, but they'll have a slow one and perhaps a goldilocks in between the two.

If you're new to technical analysis, I will tell you people often ask Colin or myself what's the best moving averages to look at. There's no answer for that question. What I can tell you is what are the most common moving averages that people use. Frequently, people will use the 20-day moving average for the short term, they will use a 50-day moving average for the intermediate term, and a 200-day moving average for a long term. That can help identify the short, intermediate, and long-term trends. Those are the most common ones that people will look at. As we go through this slide, I think it will help -- I'm going to talk a little bit about this idea of self-fulfilling prophecy aspect of moving averages. Let's take a look at this slide. When we look at the left-hand side of the chart, you'll notice that there are, in addition to price, two lines: a red and a blue. That red line is a 50-day simple moving average so the intermediate or the intermediate trend and the blue line is a 200-day simple moving average so the longer-term trend. A lot of stuff is going on in this chart. Let's break it down, what do those lines mean and what are we looking at? The first thing that I'll mention is Collin mentioned that we can use these for support and resistance so we can look at the 20-day and if price is above it, we would expect the 20-day to provide support. If it did not provide support, we would look for the 50-day moving average to provide support and if that still didn't provide support, we would look for the 200-day moving average to provide support. If that still didn't, we've had three yellow flags that this trend might be over, moving up. It's the opposite if you're in a down trend. If the 20 doesn't hold and the 50 and the 200, there's some signals there. Those are yellow flags. Keep in mind the 20-day is going to have less importance than the 200-day moving average because it entails less data. It's only looking at 20 pieces of information whereas the 200 is looking at 200 days of data.

There's tool number one for us. We expect those moving averages to provide us with support and resistance levels and if you look, you'll notice that it did provide quite a bit of support on the 200-day all the way through until we get to the right side and even the 50-day provided a pretty good amount of support for the most part as you went through. But, there's another piece to this puzzle. If you look on the left, you'll see an area that we've circled. That circle shows you a spot where the 50-day moving average, so the faster one, crosses above the 200-day moving average. That is a bullish signal. When the faster crosses above the slower, that's a bullish signal. It helps give you an idea that the trend is now moving upward. The longer-term trend, the intermediate-term trend are now moving up.

You may have heard the term golden cross. Sometimes you'll hear that in the market media on the financial news and, in fact, a couple years ago we saw one and you heard everybody talking about a golden cross. That's what they're talking about, the 50-day moving average crossing above the 200-day moving average. If we keep looking at that chart, everything looks great until we get to the right-hand side. Notice a couple things happen. We get that first cautionary sign, price crashes through the 50-day; then it crashes down through the 200-day, that's my second yellow flag; and we've circled an area in red, once again, where now the faster, the 50-day moving average, cross below the slower 200-day moving average. That's the opposite now. That's a bearish signal. Just like when we had a golden cross which just by the name implies something good is happening, this has its own name as well and it is the death cross. As that name probably implies to you, something bad is happening. If you're long this stock, that's a bad sign. You may have heard that in the media, too. It's a very colorful name. It is very indicative of what is happening. When you see that -- it works this way with all moving averages. If the 20 crosses below the 50, that's a bearish sign. If the 50 crosses below the 200, a bearish sign. On the other side, if the 20 crosses above the 50, bullish. If the 50 crosses above the 200, bullish. If the faster one -- and the faster one is always going to be the one that has less data so the smaller number of days or minutes or weeks or months in your moving average is the faster. The one with the bigger number is the slower.

There's one point out here I want to mention. The last one, there is no right combination of moving averages. We get asked that question all the time. There is no right combination. I mentioned this idea of self-fulfilling prophecy. What do you think happens if everybody's watching for a golden cross and a golden cross happens and then it's out in the news media? The golden cross has happened and now the index has got the 50-day moving up above the 200-day. We have a golden cross. People who hear that say, "Wow, that's a good sign. That's a bullish signal. I'm going to buy whatever index or XYZ stock or whatever it was that had that golden cross." That pushes the price up higher. And then everybody else starts saying, "Oh, it had a golden cross. The price is moving up. I want to get in." That's that self-fulfilling prophecy. On the other hand, if you have a death cross and you hear about it on the news, you panic, you get out. That pushes the price down and then everybody else piles in, pushing the price down. That's more of that self-fulfilling prophecy. That's why I mentioned what are the three most common, the 20, the 50, and the 200 because those are the ones that most people are looking at. Are those the right ones for you? Don't know. You have to make that decision for yourself. Just keep in mind what you're doing if you change those numbers. If you make the number smaller, it's going to be faster. That's the good news. The bad news is it's going to give you more false signals. If you make the number longer, it's going to be slower, but it's going to give you more reliable signals. That's the tradeoff.

Sometimes people will say, "I know everybody's using the 50-day moving average. I'm going to use a 48-day moving average." That's fine. You're going to get your signal a little bit before everybody else, but more of those signals that you get will be false signals as long as you are willing to make that tradeoff. That's fine. You have to figure out what works for you, but at least be aware of those most common ones, the 20, the 50, and the 200.

We've talked a lot about these moving averages, we've talked a lot about trend, support and resistance. Everything we've talked about so far had something to do with trend and support and resistance. That's by design because really what you're doing with technical analysis in particular with the focus on options is identifying the trend and looking for support and resistance levels. So far, we've talked primarily about using these signals to get in and to get out of trade based on assuming that the trade is going to stay intact unless there is a preponderance of evidence telling you that the trend is intact. What I mean by that is not one single signal does a trend end with. If you see the price moved below the 20-day moving average, trend must be over, that's not necessarily the case. That's one piece of evidence. You also want to take a look at it did it happen with lots of volume? Did it happen while it went down through another important support level? Did it have a lot of momentum behind that move? You want to look at all of the pieces of evidence to determine whether or not the trend is changing or ending and if they all line up and say it's changing or ending, now you can start looking at if it was in up trend, what’s the trend going to do now? Is it going to turn around ang go down? Not necessarily. More often than not, it’s going to go sideways, at least for a little while. It may go down after the sideways, it may go off after the sideways move. But, that’s why you’re looking at all of these pieces of evidence.

On the other hand, when these pieces of evidence get broken, so to speak, we mentioned support and resistance. We expect them to hold. What happens when they don’t hold? That’s what we call a breakout. Collin, talk to us a little bit more about what is a breakout and why is this important to us?

**Collin Songer:**

We started hitting on breakout when we were talking about earlier, support and resistance, so let’s examine that further. The most common sign of the trend change is a breakout. A breakout occurs when a trend line or a support and resistance or even moving averages as we stated before, that level or zone is exceeded up or down. It’s signifying that 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, breaking higher out of down trends or breaking lower out of up trends usually signal trend endings. Notice I'm going to emphasis that, usually. As very important what Brian said earlier about one signal does not a decision made. Remember that. Support and resistance breakouts usually signal trend beginnings so we identify those horizontal lines and then it breaks out above for an uptrend or breaks down below for a possible down trend. These are the things that we're looking at. Many successful trading systems depend on a breakout strategy.

We're going to be going a little bit more in depth how you can use these breakouts that not only help you with price direction, but also in essence help you with those opportunities, the entry into the timing of those entrants. The funny part, when we're going to go through this is that same idea of a breakout can also define where you're wrong and exit the trade as well. Remember, we want to think not only why we're getting into the trade, but where we're going to get out that way we don't lose a lot of money. We want to try and keep those losses as small as possible and the only way that you can do that is admit that you're wrong. There's no way that someone's going to be a hundred percent all those trades that you're placing. You want to make sure that you're willing to admit where you're wrong on the trade and keep that loss small. That's just part of trading. Losing trades are a part of it. We just want to make sure that we're managing that risk appropriately.

Let's break down breakouts a little further. When we think about breakouts, as Collin mentioned, they can be entries and they can be exits. If we think about it from the entry side, if we're not in a position and we see a breakout to the upside, we'll consider that to be a generally bullish move so we will want to employ a bullish strategy. On the other hand, if we see a breakout to the downside, that will typically be a bearish move and we'll want to employ a bearish strategy with our options. That's the entry side. What about the exit side? If you're already in a trade, counting on the trend to be an uptrend and you see a breakout to the down side, that can be your trigger to get out. If you're in a bearish trade where you're expecting the trend to continue to the downside and you see a breakout to the upside, once again, could be your trigger to get out because now the trend may be changing and there may not be an opportunity there for you anymore.

When we look at breakouts, they're very common for stock traders. If someone uses technical analysis and they trade stocks, they will often look for the breakout to make their decision.  Let's use an example of to the upside.  With options, you can have upside participation typically, but not always, typically for a smaller capital outlay which means that you're going to have a smaller maximum loss -- generally, you have to look at the option price versus the price of the underlying -- but generally, that's why people will look at options to trade a breakout.  When they look at options to trade a breakout to the upside, they will often use the option as a stock or ETF replacement.  If you've ever heard someone say, "I'm using my option as a stock or an ETF replacement," really what they're saying is that they're using an option contract that has a high delta.  Typically, they're going to be looking at 70 or greater delta.  If you're new to delta, what it does is give you an idea of directional exposure.  Delta for one option contract could theoretically get to as high as one hundred, representing that that option contract would exactly mirror one hundred shares of the underlying in directional move up or down.  For every dollar up that the underlying went, that option contract would go up a dollar.  If for every dollar that the underlying went down, that option would go down a dollar.  When you view this in the option chains that we have, we're saying 70 delta here, but it reflects in the option as spot seven zero or .70 or period seven zero.

Just so you know when we mention 70 delta and you look at the option chain, it’s actually in almost a percentage term.

**Collin Songer:**

The reason we bring this is up is because with option contracts, you have all the different option contracts that go from zero delta up to a hundred delta.  If you are purchasing an option contract with five delta, it’s not really going to act a lot like the stock.  If you wanted to replicate the stock, the higher the delta, the more it’s going to act like the stock for good and for bad.  If it goes up a dollar, great and you have a 99 delta contract, you’re going to go up 99 cents, but if it goes down a dollar and you have a 99 delta contract, you’re going to go down 99 cents.  Keep that in mind, but if you’re true goal is to replicate the stock action, that higher delta is going to be more indicative of what the stock looks like.

If you’re looking to trade a breakout to the upside, you want to buy a high delta call.  What if you’re looking to trade the downside?  Just the opposite, right?  Maybe you’re buying a put to replicate being short the stock and you can look for negative 70 delta or higher so that it will mirror being short the stock. It’s just the other side of it.  That’s the great thing about options. I know this pun is painfully overused, but options give you options and different ways that you can trade. Keep in mind with options you can be bullish by buying options and you can be bullish by selling options. You can be bearish by buying options and you can be bearish by selling options so both of those can come into play whenever you are looking at an option trade or an option strategy.

Collin mentioned earlier today you have to have an outlook on direction, an outlook on time, and an outlook on volatility and what you're outlook on those three things is going to dictate whether maybe you want to be an option buyer or you want to be an option seller so let's talk a little bit about that last piece, that volatility piece. Maybe, you've been waiting with (inaudible) thinking, "How am I going to look at the volatility piece using technical analysis?" Let's talk about what are the tools that you can use to help formulate that outlook on the volatility piece using Bollinger bands. Collin.

**Collin Songer:**

Before we jump into Bollinger bands, I do want to emphasize one thing here that Brian just covered which is the idea of confirmation of a breakout. That's always going to be defined by the trader themselves. The same concept that we covered in moving averages also applies to confirming a breakout. In other words, if I am defining a breakout as right away when it breaks out of there, I'm going to jump in. I'm not going to wait for a close or as soon as it pierces through that level, I'm getting in. The good part is you'll be in that move much sooner and in essence, potentially more of that move. The down side is what Brian keeps stating and he keeps warning, that also could be a false signal. That could go against you so you want to make sure that you're specific to what confirming that breakout is. That works out for your particular strategy. Understand the risk and rewards of defining that breakout and what that looks like.

When we mentioned volatility, let's talk about this is a volatility indicator that we're just going to briefly go over to just provide you an example of one. There are many volatility indicators out there, but this is probably one of the more common that triggers my use to help gauge volatility. Bollinger bands are a type of price envelope developed by John Bollinger. Bollinger bands are envelopes plotted at a standard deviation level above and below a simple moving average of the price. Standard deviation goes to those probabilities. Those who remember statistics class, you have to remember when we talk about standard deviation, one standard deviation we have roughly 68 percent; two standard deviations being roughly 95 percent. Now, as you can see, I'm generalizing that and then three standard deviations, typically being 99 percent. These are levels that it's going to stay within a particular range, in theory, from a statistical stand point. For those who slept through statistics class, you just got a quick run through up in that. Bollinger bands help determine whether prices are high or low on a relative basis.

**Brian Isabelle:**

To touch upon standard deviations, the default and what is most common is two standard deviations on the Bollinger bands. You can adjust them. You can make them one standard deviation, three standard deviations, one and a half, two and a half. It does default two standard deviations so accepting roughly 95 percent of the price action.

**Collin Songer:**

Let's go over how this particular indicator works just so you can get an example of these volatility indicators and what it's doing for us. When the bands tighten during a period of low volatility, it’s actually going to raise the likelihood of a sharp price move out of that particular area in either direction and this may be a beginning trending move.  When these bands separate by an unusually large amount, volatility increases. Any existing trend may actually be ended so prices have a tendency to bounce within the band’s envelope and we’re going to show you that in just a moment, touching one band then moving to the other.  You can use these swings to help identify potential profit targets so price can exceed or hug a band envelope for prolonged periods during strong trends and a strong trend continuation to be expected when the price moves out of these bands, that break out of these bands to the upside or downside; however, if price moves immediately back inside the band, then this suggested strength is negated.

**Brian Isabelle:**

That’s a lot to take in, right?  There’s a lot of things that you can use these Bollinger bands for so let’s take a look at how we can specifically use them and apply them to our options trading.  They can give us an idea of volatility.  We said a few moments ago that one of the things you want to be aware of is what’s your outlook on volatility.  Bollinger bands can help you formulate that outlook.  If the bands are really tight, it means that you're in a low volatility environment. If the bands are really wide, that means you're in a high volatility environment. When you look at options pricing, there is the X factor in options and that is what is the implied volatility. Implied is an estimation of what the future volatility will be. It's what the market thinks it's going to be in the future. We don't really know what it's going to be, but often times the marketplace will look at the past or the historical volatility to get an idea of what type of volatility we can expect going forward from this underlying. When we look at a Bollinger band, it can give us an idea hey, if it's been really wide, this has been a very volatile stock. When stocks are very volatile, the option contracts tend to be very volatile which makes them very expensive. On the other hand, if you've been looking at very narrow trading range, narrow bands of Bollinger for a long period of time, that's a low volatility environment. Low volatility underlyings tend to have lower volatility options, therefore they're often considered to be cheap options because they're not as expensive as high volatility options.

Also, you can use Bollinger bands to help with you directional trades so if the price has been riding along the band on the upside, keeps hugging that band, that's a strong indication that it's going to continue in that uptrend. Conversely, if it's hugging the bottom band, it's a strong indication that it's going to continue to be in that down trend so you'll be looking for it to see. The next slide is going to walk us through what this looks like in the real world.

They can also be used to identify a range. Let's take a look at the next slide. If something's range bound, we can also see it on the Bollinger bands and think about all the tools that we've talked about today. Put it all together. If you have a support and resistance level and your Bollinger band cloud is lining up with it, that's more evidence, giving you a better idea of where the price is going to tend to stay between; always looking out for either the cloud or the support resistance being broken and that can be part of your exit strategy. Let's take a look at the left side of the chart. Notice how wide that Bollinger band, that orange-ish, brown-ish shaded area is the Bollinger band, that cloud area around the price. That would have been a time of high volatility. There was probably a big move that was just on the left side of this chart prior to where we screen captured. But, what do you see happening? After that big wide cloud, it starts to narrow. Notice the stocks start moving sideways. The cloud starts to narrow and then it starts to widen and what happens with the price? It goes up, it hits that Bollinger brand in the cloud, and it starts riding up, hitting that upper band, indicating that you're in a strong up trend while it's riding that band.

Notice what's in the very middle of this Bollinger band, a 20-day simple moving average. Once again, putting another piece of evidence to work for you. Take a look. What is the 20-day moving average? That can often be used as the middle of the Bollinger band. Most Bollinger bands are going to be set with a default, having the middle of it be the 20-day moving average. As you notice, hugging that cloud, everything's great, it gets that peak, price starts coming down. What happens? It hits the simple moving average and that actually provides a little bit of support, but then it breaks down and it goes right down to the lower end of the cloud, hits that, bounces back up, hits the upper end of the cloud. Notice this starts vacillate between the cloud, the upper and lower bands. That's what we're looking at these bands for. That's why we want to see is it providing support and resistance. As you notice, the widening of the band indicates higher volatility.

I know that we’re getting close to the end here.  Collin will put up the last slide, these are some of the resources you have available.  You can always take a look at some of our other coaching sessions.  You can always give us a call, we’re always happy to help and answer any questions from today’s webinar or from any other questions that you have.

END OF AUDIO FILE