TRANSCRIPT

Getting to know the Greeks for options trading

Konstantin Vrandopulo: Welcome in everybody. Both myself and Robert are very excited to spend the next hour with you. Today, we appreciate you committing the next hour to spend with us. We certainly understand that your time is valuable, and we most definitely hope that spending it with us is going to serve you well. Today's topic is deemed to be an intermediate-level topic and we're going to assume a few things such as, you know, options basics. We're going to assume that you're going to know the differences between the calls and puts. At the end of the day, they're calls. They're puts. You could be long them or short them in many different combinations. And options trading is a zero-sum game. And that means that there's always a counterparty to your trade taking on the opposite side of your trade. If we think about that instance in and of itself without whatever else the counterparty might be having as their exposure in their accounts. So, that's exactly what makes the market. A buyer and a seller meet at last to do business together. So, understanding what is good for you in a given strategy is bad for the counterparty is the essence of the topic at hand that we have gathered here today to discuss. So, let's lay out the plan. So, the questions that the gentlemen are going to be asking. You know where they fit according to plan for the next hour. We're going to

describe each individual Greek and introduce it. We're going to talk about how you can use Greeks to plan an options trade. And then, of course, once you put a trade on, we're going to finish up on how you could be using option Greeks to manage trade that you're already engaged in currently in the account. All right. So, getting to know the Greeks. Now, you could probably imagine that with a name like mine, I would have to be familiar with the Greek alphabet. Both Rob and I live in the state of Florida and we're no strangers to hurricane seasons here, which is why I'm down one for the year of 2020 and the hurricane season was so active that meteorologists had to switch to the Greek alphabet because they ran out of letters to name the storms in the English alphabet and that apparently was only the second time since 2005. Well, as options traders, we use Greek letters every single day. Now, if there are Greek folks in the audience today and you happen to speak Greek and you're sitting here scratching your head reading through the individual Greeks on this slide and thinking that there might be some sort of a typo, that is exactly what I was doing the first time I was introduced to option Greeks almost six years ago. Well, you know, what can I tell you? We just westernized one of them and made it sound Greek. And I'll talk to this specific one on this slide when the time comes. Now, what do the Greeks effectively tell you? So, very quick introduction here. We are thinking about our exposures and the important thing to remember when we're looking at an options chain, the

option Greeks are presented to us from the perspective of a long option holder either long calls or long puts. Now, we understand that there's always a counterparty to the trade. So, effectively, the signage on the Greeks would be reversed for those who are going short options. So, delta. A measure of the rate of change in an options theoretical price or value given a one-unit change in the underlying security. So, that is our directional exposure effectively and the one-unit change -- the reason why we say it that way is, of course, you can trade options in many different things. It could be stocks. It could be exchange-traded products. It could be indices. So forth and so on. So, one-unit change is just speaking to the value change and the underlying in and of itself. Now, we understand that delta has, you know, one job to do effectively at the end of an options life. It either becomes one, right? Plus 100 or -100 or that option expires worthless. The option either becomes long or short stock or it's going to expire. Now, what is getting that option or that delta to one or to zero is gamma. So, you could be thinking about gamma as the rate of change of delta and more detail on that in the coming slides. Now, the next one, vega. The measure of the rate of change in an option's theoretical value for a one-unit change in implied volatility. And this, relatively speaking, unicorn that all option traders try to saddle. So, changes in implied volatility are measured by vega in terms of how the effect of the price of that option. We know that time only goes in one direction. It goes forward and an option

has an expiration date. So, what theta helps us with is giving us a measure of the rate of change of an option's theoretical value given one day passing in the calendar. Then finally, rho. The measure of option's theoretical value to the changes in the risk-free interest rates. And we will probably spend the least amount of time on rho for a specific reason that we will discuss when the time comes on that specific slide. Now, Robert. Over to you, sir. In just a moment, but what we need to understand is that we are dealing with different types of exposures here when we are trading options. We have a screenshot of an options chain. Here, the underlying is trading roughly at around $75 a share and we've highlighted, along this options chain, some in the money options, at the money options and out of the money options. The ones that are trading at roughly around the $65 strike. The ones that are trading at the money meaning right around the current price of the underlying at 75 and some of the ones that are trading out of the money at 85 strike calls. Now, the options chain has a feature, in Active Trader Pro that allows you to plot two columns for intrinsic value and extrinsic value or time value. And we need to recognize that again, at the end of an options life, there is either intrinsic value in an option or there isn't any, meaning you were either exercised or assigned and you are becoming long or short stock or it expires worthless. Now that time value is the piece that is being affected most by options-centric risk. That being timed expiration in terms of days, volatility that is effectively a measure

of the supply and demand for options, and the changes and differences in interest rate if they do change in the timeframe of your ownership of that particular underlying. So, Rob, over to you to talk to us about probably the most widely known Greek and how we can use it, sir.

Robert Kwon: Yeah and hello everyone. And as KV mentioned a couple times, right, we use the word theoretically. So, I do want to say and especially when I first started, I probably didn't focus enough on this is don't get lost in the theory. In the end when the market is open, the marketplace determines the premium of the option. End of story. So, keep in mind. The greater the liquidity, the more closely it may follow the theory. And if you're in a kind of illiquid situation, you want to be aware that you can theoretically hypothesize. Say my options should be this but as Konstantin touched upon, you need somebody else to trade with you. And if there's nobody, right, there's not enough people, you know, at the party to find a counterparty, right, you have to deal with the realities of that situation. So, let's start with delta. As briefly touched upon, delta is theoretically, how much are option contracts price, also known as the premium, will change for a one-point change in the underlying. And as Konstantin mentioned, delta can range from zero to an absolute value of one. And it can be positive or negative. So, long calls and short puts have positive deltas, meaning the benefit from upward movement. Long puts and short

calls have negative deltas. So, right off the bat, a good rule of thumb to remember is that in general, at the money strike price, options have approximately 50 delta. In the money options, we'll have deltas greater than 50. Say something like 70 or 90. And out of the money options, we'll have deltas smaller than 50. Say like 30. So, in this example, the premium of a long call would be delta of positive 50 or you might see it on the option chain expressed as a decimal point, 50, theoretically will increase 50 cents for a one-point rise in the underlying and decrease 50 cents for a one-point decline. In addition, since a standard contract of an underlying stock or exchange traded product covers 100 shares, an alternative way to look at this is many traders will get delta as a shared equivalent exposure. So, a positive 50 delta for an at the money long call would be the equivalent at that moment of having 50 long shares of stock. And a third way that delta is used for trader. It's used as the substitute for the probability of finishing in or out of the money at expiration. So, an option with a 50 or 0.50 delta without bias -- right? Stock can either go up or down -- has a 50% chance of finishing in the money at the expiration date. So, moving along to the next slide. Let's talk about gamma. Gamma tells us theoretically how much the delta should change based on a one-point move in the underlying. So, the other Greeks are trying to tell us how much the premium of the option will change. And gamma is the second derivative. It's trying to tell us how much delta will change, and it's measured in delta. But

like delta, gamma can be positive or negative. So, one crucial thing to remember -- and this is the thing that stuck with me first, Konstantin -- is not necessarily the numerical value of gamma but if you're just learning about this, the most important thing is long options. Not a long bullish outlook but long options, meaning both long calls and long puts have positive gamma. And short options again, meaning both short calls or short puts have negative gamma. And then, gamma is also a highest at the money strike prices. So, again, in that previous slide, we discussed the different levels of moneyness and how they have different deltas. So, gamma's trying to quantify how the delta's going to change as the moneyness. So, for example, if you have an at the money long call option, your delta is generally positive 50. And say you have a gamma of positive 10, so if the stock moves up one point, all else being equal, your long call option should have a delta of roughly 60. And some lower gamma values say 7. And if the stock were to drop one point, your delta would be 40 instead of 50. So, what does this mean for long option holders? Positive gamma increases delta as the underlying moves in your favor and it decreases delta as it moves against you. So, the way we were taught, Konstantin, it kind of accelerates your gains. And it actually decelerates your losses. Right? So, let's look at the opposite side of that. But also, from a bullish position. So, in another example, say you have a at the money short put, once again, your delta's generally going to be positive 50 but your gamma

will be negative. Say negative 10. So, looking at the two scenarios we've looked at with the long call, how does this change? Well, if the stock moves up one point, all else being equal, your short put should now have a delta of roughly 40, meaning the next point higher actually benefits you less. But if the stock moves down one point, your short put should have a delta of roughly 60. So, for short options, that negative gamma actually, right, slows down your gains. It decreases the delta as it moves in your favor. But conversely, it increases the delta as it goes against you. So, it kind of accelerates your losses. So, Konstantin, why on earth would anybody take this side of the trade. And there is a reason, which Konstantin will talk about in the theta section. So, I'm going to take it back to Konstantin. We'll talk about the other Greeks.

Konstantin Vrandopulo: Thank you, Rob. So, let's talk about this non-Greek letter, vega, that I talked about again, we just is westernized it. Made it sound Greek, right? But what does vega tell us? Well, vega tells us how much an options value going to change if we observe one absolute percent change up or down in the implied volatility value. Now, we have whole one-hour webinar on-demand as well as coaching sessions that we do on implied volatility. I did talk about the fact that I like to refer to it as maybe this unicorn that all of us options traders try to saddle and why that is is because implied volatility is truly an output out of the marketplace. We think about the options pricing

modeling. What goes into it? The price of the underlying. The time that it has until expiration and, you know, months. Weeks. Days. Hours. Whatever it might be. We know the current interest rate environment and we know that; you know, it hasn't been changing very drastically and probably won't for a long while. We know the dividend rate environment and companies generally don't change their dividends willy nilly without forecasting the changes that are coming ahead of time. But what we do get out of the marketplace is the price for any given option, as Robert said. At any given moment in time to throughout the trading day. So, the implied volatility is referred to as the X factor in the option pricing model and it is the measure of demand or supply. And I would say, the measure of both and consideration of which guide is outplaying the other. And we talked about the fact that options trading is a zero-sum game. So, every buyer, there's always a seller. So, if demand is picking up and it's outweighing supply, does that mean that there is no willing sellers out there? No. Someone is going to be selling you the contract but, all else equal, they're only willing to sell it to you at incrementally higher prices because they're seeing this demand is queuing up. Vice versa, if the majority of market participants who are initiating brand new positions are deciding to be option sellers, the demand is going to be there to be taking the other side. But they're always going to be there at incrementally lower prices. So, effectively, the higher the demand for option, the higher the implied volatility.

And if that demand wanes and the supply is the predominant factor of initiating option positions, then implied volatility contracts. So, vega tells us the change and the options value for every one absolute percentage point change in implied volatility. So, in this case and an example, if you have a vega of 0.05, your option price should gain or lose five cents and remember pennies in options trading mean dollars to us because each standardized contract represents 100 shares. So, gaining or losing five cents depending on whether the stock goes up or implied volatility goes up or comes down. All right, very good. So, the next rate is Greek is going to be theta. Tells us how much an options contract value is going to change based on one day passing in time. Now, I talked about the fact that time only goes in one direction. I like to quote Abraham Lincoln here to say that he mentioned that the future comes at us one day at a time and that is certainly true for options traders as well. So, time only goes in one direction and theta helps us recognize by how much our options values going to change given one day passing. Now, if I'm a long option holder, I am going to have negative theta exposure, right? So, meaning I actually need to overcome my time value in order for me to start making money on my trade. So, whatever it is that I am paying in time value for that option, I need to overcome with either implied volatility rising or the movement in the underlying stock in the direction that I want it to move. We need to understand that Greeks are not static, and this is very important. So,

not static specifically when it comes to theta means that it doesn't have a leaner equation. Each day, week, or month that passes does not affect the option value the same way. And it's specifically is, you know, very pronounced if we are thinking about at the money option. The decay accelerates for at the money options in the last 30 to 45 days of a contract's life and really starts to accelerate in the last days or weeks before that option expires. So, what does that mean? Well, if I have an option that is expiring one week from now versus I have an option that is expiring one year from now, one day of passage in time is not going to be affecting my theta value the same way for those two contracts that have different time frames until they expire. OK. Now, Robert, over to you to talk about rho and why maybe at some point in our future, it could potentially become an important Greek to be paying attention to.

Robert Kwon: Yeah and just quickly on the comment I made earlier about why would anybody take the trade that has decelerating gains and accelerating losses. It's because of that positive theta. The short option, right, seller can win in more ways than the person buying so we kind of refer to this as the gamma theta tradeoff. Right? So, just understand the different sides of your trade and what benefits you, right? It must turn the other side in a vacuum. So, let's talk about rho and why it's good to be aware of it. Right? But what does this do? Right? And kind of explain why KV made that comment earlier about maybe

you won't spend as much time depending on, you know, what specifically your objective is or which one you use. So, it tells us theoretically how much an option premium will change for a one percentage point change in interest rates. So, right off the bat, you want to know long calls and short puts have positive rho and long puts and short calls have negative rho. But again, usually the least important Greek for many traders. The first reason being interest rates can move very gradually and I don't want to say forecast with certainty but kind of telegraphed. Right? So, rho's quantifying a one percentage point change in the interest rate. Well, when's the last time interest rates changed by a full percentage point? So, again, the primary reason is because the current interest rate environment and how it's handled. It can move gradually and a lot of times, right, you can potentially prepare for them. At least guestimate and you have the dot plots and things like that. Right? The other part of it is rho is actually generally relatively small for shorter dated options. So, even if interest rates were to change, the option premium could be more impacted by a change in price of the underlying or a change in demand to the options. Think about the theta situation. If you sold a longer dated option, the theta is relatively small theoretically. What would be the primary thing you would use, right, to guestimate how you would profit well ahead of expiration? The other aspects of your trade change in the stock price and change in demand of the option. So, if you look and see what the real value is knowing

that that is the theoretical change for a one-point percentage change in interest rates, then you can do some simple math. If you're a very short-term options trader especially if we're in between Fed meetings and things like that, some traders don't even look at it depending on their style. However, longer dated options like leaps can have significantly larger rho values and of course, over longer periods of time, you may anticipate more significant changes in interest rates. Therefore, if you are specifically trading longer dated options, rho is something you may want to look at much more closely and that's something you want to factor into your forecast. So, again, there is a price outlook, a time outlook, and then, a demand outlook like how it happens. But because for longer dated leap options, that rho is no longer maybe some trivial, inconsequential value. It could be significant. If you're anticipating or projecting a change in the interest rate environment, you do want to factor that into your outlook. So, going onto the next slide, putting this all together. Greeks do not work in a vacuum. When we first learned about the Greek, right, we say all else being equal, this theoretically should happen. That's constantly mentioned, right? All else being equal doesn't exist. So, the reason we do this is to kind of simplify the concepts. It worked for me when I started. To focus on what each Greek is trying to express in isolation. That time is always passing. The situation is always changing just through time. But even if the underlying price is the same, the demand for the option could be dramatically

different. So, imagine this. Imagine a day that opens significantly down and recovers to close flat whether it's the market, ETS centers, Spock. Then, imagine a day that opens up significantly and then, sells off into the close to close flat. So, from an option pricing standpoint and a model, the underlying price is exactly the same or close and one day has passed. But what might be dramatically different in the demand for the options? So, one thing the Greeks don't tell you is is there a potential bias in option, investor, and trader behavior depending on how something happens? The Greeks are just trying to quantify those changes. You still have to decide on the inputs.

Konstantin Vrandopulo: All right. Very good. So, now we're moving onto the piece where we understand how we use the Greeks to plan our options trades. So, we understand that Greeks don't work in a vacuum. They give us measurements of how our option value is going to change theoretically given our assumptions and options traders. We need to have the three-part forecast, which makes options trading a little bit more tricky than trading individual securities by themselves. Why? Because not only that we have to consider directional exposure meaning up, down, or sideways then make a judgment call on that, but we also need to consider how much time exactly it's going to take for your directional view to play out. And what is going to happen to supply and demand between now and the date of expiration of your contract?

So, Greeks give us the way to understand these risks and we know from the first couple of slides that you could do long or short options. And if we're thinking about not the options strategy and what the name of that strategy is called, is it a long call? Is it a long put? Is it some sort of a spread? Maybe a complex spread. But instead think about our Greek exposures. We shouldn't really care or wonder what the options strategy is called. All we care about is what is good for me and what is bad for me? And what do I have currently on? And if my outlook is of a certain type, how can I structure a trade to take advantage of that outlook in the best possible way? So, consider this. If I want to create a trade where I want to minimize my exposure to directional movement in the underlying, what would you do? So, Robert, over to you, sir, to talk to us about how we can use the Greeks to help us plan a trade.

Robert Kwon: Yeah and so, one of the things that Greeks help us with is identifying kind of like a profile. So, look at the screenshot here. We have a 30-strike call and a 30-strike put. And notice the minus sign next to the quantity. So, this is a short straddle. That's the nickname for it. What's the profile? So, these contracts when we took the screenshot, were roughly close to the money. How do we know that? Because the delta for each one is roughly close to 50. Right? So, this would be referred to as a delta neutral starting trade. And one thing to keep in mind. It is theoretical. So, it can be very difficult to, you know,

get those numbers to be exactly, in this case, zero. Right? But in general, our initial exposure to delta is minimized. But what's not showing on this screen, KV? That's the whole point of this exercise. The minus sign next to quantity means that we are short these contracts. So, what is shared with short calls and short puts? Positive theta but negative gamma. So, this is an example of a delta neutral trade to take advantage of a direction neutral as the outlook, meaning you expect it to stay in a range. Right? So, that's the planning part of it. Right? Obviously, there's an opposite side to this trade, which would also be delta neutral. Right? Instead of shorting both these contracts, we might buy them. That's the long straddle. So, while still at delta neutral starting trade, that is a direction indifferent outlook. But you would actually want it to move versus stay in a range because the opposite side of this trade would have positive gamma. But of course, what would be the big negative aspect of buying the straddle, KV, is you would have double the theta exposure. Right? So, you would need it move by expiration to overcome both the premiums you bought to get to your breakeven point. Again, two sides of the same coin. So, why are you taking your side of the trade? Obviously, it's because you may disagree with somebody that you're about to trade with. Right? That's what actually brings traders together. It's not like, "Here. Here's a fair price." It's like, "I disagree with you in some form." Now, as Konstantin touched on, we don't know what's in the other person's portfolio. It could be a retail trade like

yourself or myself. It could be an institution. So, for an example, if somebody sells a call, well, if they own the shares, that's a comfort call. So, why might somebody do that versus the person buying that call? It's still a bullish buy and straight. You may just not be as bullish as the other person. So, you could still be tilted to the same side just to varying degrees. The Greeks help you quantify that. How much will this help me or hurt me? What am I giving up and what am I changing by making this adjustment to my situation? OK. So, think about it in terms of your risk profile. What helps me? What hurts me? And quantifying that and set up just a kind of general subjective type of expectation.

Konstantin Vrandopulo: All right, Rob. So, we've placed the trade with the three-part outlook that we've created. In the screenshot in the previous slide, direction neutral hoping that the underlying is going to stay in a range selling that premium. Hoping that the stock is going to sit down pat or move very little. Now, we've placed that trade. We need to understand what we need to do to manage that trade as the future comes at us. One hour. One day. One week at a time. Right? So, the time has passed. The underlying security has moved. The supply and demand equation expressed in volatility terms has changed. So, we're looking at our Greeks again to understand if we need to manage that trade. What specifically do we need to do? Because we now

recognize how our original exposure has changed based on those things that have transpired. So, by looking at our delta, what it's becoming over time. We can see how our directional exposure is changing and whether or not, that still fits the bill of our original outlook or not. Does it have to be changed? If so, by how much? We can use that information to determine whether you want to adjust a trade based on what has transpired and maybe you've changed your mind on the original outlook. In delta terms, on the directional outlook. Or I'm just going to leave it alone and let it rise. So, Robert, the adjustment part. Again, thinking about the strategy not from the perspective of I placed the trade and it had a certain Greek exposure at the time. Now that new information has come about. Time has passed. Volatility has changed. The underlying has moved. What sort of exposure do I have now knowing that options are a constantly changing asset? How do I deal with it?

Robert Kwon: Yeah, exactly. Right? So, I mentioned earlier that the short straddle initially had, you know, in this case, slightly positive delta. Roughly four-ish. So, kind of close to delta neutral. So, we specifically cut out parts to help you with the learning process as we go through this, but obviously when you're utilizing the tools, you'll see everything together. How did we end up now in a situation with negative 51.9 delta? What must have happened more than likely to create the situation when we have a short call and a short put? It

must've gone up. So, what happened? Look at the short put. We talked about the example if we haven't at the money short put, what happens if it goes up in our favor when we have negative gamma? Well, each subsequent point higher helps us less and less because the delta gets smaller. On the short call side, it has negative delta. If it goes up, that means the delta's getting more negative as it goes against us. So, we ended up in this situation because the stock moved up. So, what benefits us currently? It doesn't matter that we started with a delta neutral position. What is our position now? We have negative delta meaning we want this thing to come back down towards 30. So, if you have new information however you base your decision structure, right, like technical analysis or a price target or something, what is your expectation now? And how does this fit with that? If you think wherever the stock is in this example it's going to stay roughly in that range and you would be delta neutral at the current price, well, what's no longer optimal for that specific outlook? The current structure of your trade? And it may warrant an adjustment. Of course, if you think it's going to back down and you would benefit from that, you can certainly hold it. But does your current expectations from here match what the situation is? Not what it started out as. And Greeks helps us quantify that scenario and try to drive that decision making. Are we comfortable with this exposure? So, don't get married mentally to what your position started out as. It's different from stock. A stock... 100 shares,

whatever it's trading for, right? As long as it's trading, it's 100 shares of stock. And in fact, from a conceptual standpoint, stock is delta and we refer to things like gamma, theta, vega, and rho as options-centric risk. So, look at it from a fresh perspective and try to make the best decision you can and the Greeks help you quantify that because if you wanted a specific numerical exposure, compare that to your current one, and that can potentially influence the appropriate adjustment, if not just flat out closing the trade.

Konstantin Vrandopulo: Very good. So, we're at that time to kind of summarize the points here. We've familiarized ourselves with the Greeks. We understand that they help us examine the exposures that we either currently have or the exposures that we would like to lay out in our account for those very options-centric risks as well as, you know, directional risk if we're talking about delta. We analyze them. We recognize that there are millions of market participants making decisions. Every single day, there are thousands of underlyings to trade options on. And the option market, when it's open, is constantly bidding and offering a value for that specific strike expiration in the underlying that you were thinking about trading. So, the market is the true pricing mechanism of options and we are just sitting or looking through the lens of the options theoretical pricing model of what these effects are and how we can quantify. So, we know that Greeks are dynamic. They're not staying constant. We

learned about the change in delta today through the prism of gamma and what it does and what its job is to get delta at the end of an options life to one or negative one or zero. And that dynamic for theta, for vega, and for rho is going to be changing depending on what's happening in the marketplace.

Robert Kwon: Yeah. So, just to kind of summarize and this is where, like, for me personally as a trader, really helped me. Again, I can't emphasize. Don't get lost in the theory. So, the Greeks help you plan your trades around a profile and there can be certain things you want to take advantage of or minimalize. And of course, Greeks helps us manage our trades by understanding what the current profile looks like versus what it started out as. But let me give you a couple of examples. If you are trading a long-dated option out close to the money, the theta difference theoretically between say a 12-month option and maybe a 18-month option, theoretically will exist. But in reality, the primary driver of what will show you profit or loss in the short-term are the other aspects of the trade. The delta exposure. Right? And the vega exposure. In a similar fashion, imagine that $30 example and imagine that option expires this week in a couple of days. The difference between theta 31 strike and a 32 strike when you only have a couple of days left may be very significant. But if you have some option that doesn't expire for two years, while there will be a

theoretical delta difference between a 31-strike option and a 32, it's generally a slight variation of the same trade.

So, this is what I'm referring to. Don't get bogged down, right, in theoretical differences. Try to identify as specifically as you can what your framework is and Konstantin, the way I like to think about it is imagine you go to a hardware store like one of the big ones. What's the first thing you do especially when you're new and it's the first time your there? You find somebody that works there and be like, "Hey, this is what I'm trying to do." And they send you to the right section of the store. What do you do when you're there? Then, you look at the details. Look at the pricing. Examine slight variations. So, this is the specific tool you walk out with based off a more, like, specific process once you're in the general rate section of the store. So, your outlook... be as specific as possible and that will get you to the right section of the store. Then, with the details -- this strike versus this one. This expiration or this strategy versus this one. Use tools like our profit-loss calculator, which has an option pricing model and then, you can experiment with different versions of positive and negative scenarios to say, "OK. This one rewards me the way I want, and it goes against me. OK. I like how this one behaves in the negative scenario for a risk management perspective." That's the process that you should be following. Your outlook should lead you to the tool that rewards you

appropriately if your guess is correct but also, am I comfortable with the losing scenario if I guess wrong? And of course, we'll know more tomorrow than we know today. I mean who knew what 2020 would look like in 2019? So, especially if you have a longer dated outlook and you still have that option, I'd imagine you traded the one-year option. After six months, it's no longer a one-year option. It's a six-month option. Imagine you traded a one-month option. Well, after two weeks if you still have it, it's no longer a one-month option. It's a two-week option. So, a lot of trader envision what the end of their option trade looks like and have a game plan for it rather than, "I'm entering this position and I'm taking it to expiration no matter what." You have the right to change your mind. If you change your mind because you have updated information, there's nothing wrong with that. Try to put yourself. What's the trade I would place right now as a new trade if I didn't already have one? And then, compare it to your existing position. If it's close enough, that may warrant holding it. But if you're telling yourself based off the trade I would place now as a new trade with my updated outlook and then you look at your current situation and you know where to close and you can quantify it from the Greek perspective, what are you telling yourself to do? Close it and do something else.

Well, that's kind of the way that the Greeks helped me... is to put some numbers next to my subjective interpretation of the situation to try to have a more consistent way of making a decision.

END OF AUDIO FILE

Technical analysis focuses on market action – specifically, volume and price. Technical analysis is only one approach to analyzing stocks. When considering what 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 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.

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