

TRANSCRIPT

Using the advanced charting capabilities

Presenters: Matt Davison and Peter Janssen

Matt Davison: All right. Welcome in, everybody. My name is Matt Davison. And Peter Janson is back with me, joining me for session 3 here in our active Trader Pro Series. And today we're all going to be talking about demonstrating the power of the charts. It's probably the most used tool that Peter and I personally use on a daily basis. And really, there's a lot that we can show with this. We're going to try to do a comprehensive approach, show you the very basics, changing things like the settings, time frame, and frequency.

We'll also show you how to make the annotations on the chart, the indicators that we provide, as well as some of the algorithmic type stuff that we can do provided by Recognia. So we'll show all of that, and dive a little bit deeper into that throughout the session today.

That being said, let's jump right in here, and of course, what we want to do in order to get our chart, we're going to come right up here to charts. Now we have a pretty healthy list of all the ones that we've created, and this is not by default going to be on your Active Trader Pro. So if this is your first time logging in and looking at a chart in Active Trader, you won't see anything above this line, you'll simply see New Chart.

Now I'm not going to click on New Chart. That's what you would do. I'll show you why. If we click on New Chart, it's actually going to default to one that we've prebuilt. It's not going to look like that for you, it's going to look more

like this, which is the blank chart that we have. Usually it defaults to two different tabs today, and there will be a second one here that says the one year chart. And of course, like any other tool that we've utilized thus far in Active Trader Pro, we want to put in a symbol, and I'm going to use NVIDIA, for our symbol today. And you'll notice as soon as we put that in, it's going to fill up our chart. For most of you, it's going to default to a different type. It'll look more like this, which is the open high, low, close, also known as a bar chart. And basically it'll default to six months.

Some of the immediate things that I want to address, of course, is how do we change this. Right? I kind of just showed you quickly, but let's talk about the different ways that we could potentially look at the data, the pricing, as well as the potential volume.

If you go up to your Settings tab right here within the chart, if you click on that, first thing that we can do is we can change our chart type. So of course, we'll default to the bar chart. A lot of people-- we all in the desk prefer the candlestick filled. It'll look something like that. Basically it's just giving the actual filled bodies for both the up days and the down days.

The standard would look like this. We're basically the up days based on the open and the close are not going to be filled in. They'll still be in green by default, but won't be filled in, whereas the red candles will be. And then you can use the hollow, which is basically where we're both are unfilled. I don't really know anybody that really uses that one, but if you do like that, if that's your personal preference, it's certainly available.

We can, of course, use the line chart. And if we do, this will kind of take me to my next point here, which is a lot of people don't like to see a multi color line. So rather than using a line chart that's red and green, a lot of people would like to switch this over to one color so you can just kind of see one continuous line over time.

This is especially useful if you're looking at certain things that don't have lots of liquidity, or they're maybe only posting one value per day, so you don't want to see the ups and downs, you just want to see that closing line over time, line chart are going to be quite helpful.

Mountain, of course, is going to be very similar to the line, it just effectively shades in everything beneath the line. And then for any of the people that are still interested in using those point and figure notations, you can certainly switch it over to this.

A little bit of a dated way of looking at a chart, but some people still find a lot of use in these. And certainly if that's something that you're interested in, you can use that point figure.

I'll switch it back to Candlestick for now. I'll change my colors back to green for up, and red for down, and we'll think about a couple of other things here. So first of all, you'll notice right now I don't have any volume on my chart. If I do want to actually see the volume, all I have to do is check this box, and voila, we'll see the volume chart show up with the bars.

We can also show things like price volume distribution. So if I click on this, what this is going to do for me is it's going to show me all the different levels

and the various volumes at those levels. So you can start to see where maybe there's a potential place where support and resistance might have a little bit more validity, simply because there's been more shares agreed upon at that particular price.

Very useful when we're looking for that idea of confluence basically, are we seeing a pattern, or are we seeing a particular structural support or resistance level, is it being lined up or basically adding to the validity backed up by volume. So that's something that's going to be helpful for a lot of people. We can also, quickly if we right click on the chart, we can go down the settings and turn or toggle on or off any of the things that we're looking at. And for now, I'll just turn that off briefly.

We can also show the previous close. A lot of people like to do this. Maybe not on a daily chart, but if you're looking at a more intraday chart with 5 minute candles, 1 minute candles, a lot of people like to see that prior level close just to kind of see how it's interacting with that price.

One other thing that I'll show here is we can turn off the grid line opacity. So right now we have the 50% on. Personally when I'm using my charts, I typically don't like them on too much. I will usually turn it down to at least that 15%, 20% level. But if you don't like them at all, you can just slide that down all the way. Some people prefer this.

And of course, we have the watermark right underneath that. That's just the symbol. So if we move this over, we'll hit Apply, it's just talking about this right here. It gives you the ticker for the company as well as the name. You can always turn that off. If you would prefer to see it, or if you want, you can always

make it darker. I usually like to keep it about 10%, see it on there, but not drawing too much of my attention to that particular chart.

Now one other useful thing here. And for six months, it's maybe not going to be quite as relevant. One could argue that this is a pretty large percentage move coming down since March. So maybe we could switch it over from a linear chart, which is basically showing us every single value here is going to be evenly distributed.

If we switched it over to logarithmic, what we'll start to notice here is that as we get to the top, the numbers are going to get closer together. So on the y-axis, they're going to scrunch up. And basically what this is trying to show us is the percentage change moves. And it's really more helpful usually when we're looking at extreme price change or when we're looking at longer term charts. And as you can see, when I switch it over to that logarithmic chart, well, it's showing you that the price action that Nvidia had from 2016, from \$7 all the way up to \$67 towards the third quarter of 2018, that's a huge percentage move. And even though in points, we've moved a lot more in the last couple of years, in terms of percent, this is actually the bigger move. Right? This one, or that one, and then potentially even from 2020 coming out of COVID to the most recent highs coming at the end of last year.

We want to compare here just for a second, turn it back to linear, and you'll see it, well, it looks like, hey, this wasn't really that important of a move from 2016 to 2018. Obviously that's not true in percentage terms.

But when we're using a linear price axis and we're looking at old pricing data that's in the teens or maybe even the single digits, it tends to place a little bit more emphasis on the most recent data as price has grown exponentially. So oftentimes logarithmic chart is going to be helpful if you're looking, again, at those longer term charts. I'll leave it on linear here for just a couple of moments. I want to focus on a few other things here.

So first of all, let's say we're looking at this longer term chart, but we want to zoom in and say, OK, well, what was going on here. We have this huge basing pattern where it went up, set this high, 2018, and then formed this kind of cup throughout the rest of the year going into COVID. What if I wanted to zoom in on that?

In order to do that, you click on this magnifying glass with the plus sign. You left click on it. As you slide over the cursor, you'll see that we have the magnifying glass. You will take it to the spot that you want to start zooming in. You will left click and hold, and then drag over to the spot to the right that you'll want to look at, and then you let go. And you can see once we do that, it's going to zoom in on that particular part of the chart. You can see a little bit more clearly what the price action looks like. It gives us a lot more color and detail at this moment in time what was actually occurring.

If we want to then immediately go back to what we were just looking at, we can come back here to the magnifying glass with the minus sign in the center. If we left click on that, it'll take us right back to the spot. And we can do this multiple times. If we zoom in, let's say we zoom in to here, and then we go right back over, let's zoom in to this spot right here. We'll be zoomed in twice if we left click twice, it'll take us back to the original chart.

So always like to show that. It's really helpful when we're trying to analyze certain things and it's a little bit harder to see, especially on these charts that have moved a massive amount towards the last couple of years.

So let's talk about time frames. In the bottom left hand corner, we see a couple of different default dates that are time frames that we can put in, today, 2-day, 5-day, 10, going all the way out to 10 year, and then we have our Max Chart. Now notice right now we're on daily and 10 day. If we were to switch over to Max, notice what happens to our frequency. If we click on Max Chart, it changes our frequency, because to go all the way back here to 1999, we no longer have the data supporting the daily charting, so it switches automatically our frequency for us.

Let's say we wanted to go back to daily, well, notice that it takes our chart back to this kind of default of just over a year. However, if we want to see more data, we can also click on this triangle in the bottom left corner right over here, and we can scroll it back.

But even in this example, it's not giving us everything that we could possibly see. Again, if we switch over to 10 years, we can still see daily. It'll take us back. So what if we want to go the opposite direction? What if we want to zoom in from not the last 10 years, but we want to look at the last 10 days? Well, we can click on that.

Notice that we can still view the chart in terms of the daily move. If we switch over the frequency though, all of these frequencies are the ones that are compatible with these 10 days. So the lowest amount of frequency that I can use and still be looking at the full 10 days is the 10 minutes, though I can do it

in 60, 30, or 15 as well. And then we can do custom entry day, and you can basically use anything 10 minutes or above.

So let's switch that over to 10 minutes for a second. And you'll notice that we have a couple of different things highlighted on the chart. So we have these wide areas, and basically what that's showing us is the actual standard session. Everything that's shaded in gray, that's giving us the extended average session. Again, under Settings, we can toggle that on and off depending on whether or not you want to see it. Most people like to see it, especially if there's some kind of big earnings announcement or there's some kind of big news that gets released before or after the market open to see potential reactions to that and some levels that it might hit.

So once we do that, we can obviously see what's going on with the 10 day, and we can even narrow that down a little bit further if we switch over to today, and then we can look at as little as 1 minute. Right? So 1 minute chart. It's giving us every single candle for every single minute thus far today. And as you can see here, by toggling this on and off, this will take us as far back as we can see with 1 minute data. You can see that this will take us all the way back to basically the closing prices here on the 25th. So that's the most that we can see on this particular chart with the 1 minute candles.

So one other thing that I'll show, and then Peter, I'll turn it to you after that. Switching the frequency over, we can do these custom intraday. So a lot of people like, for example, the 65 minute. And the reason why this is useful to a lot of people-- And you can see we can go back quite a ways using the 65 minutes. And let me just turn off the extended hours here. And what's helpful about this is it breaks or subdivide the trading day into even increments. That's

why a lot of people prefer 65 minutes over the 60. Because if we look at the trading day, it starts at 9:30, ends at 4:00, 65 minutes evenly subdivided that for us. And we can look at a chart this way.

So some people prefer that. You can do that certainly if you'd like. And we'll talk more about how that will affect indicators here in just a moment. I personally sometimes like to look at the 2 minute instead of the one minute just because it smooths out the data on that intraday basis a little bit better. It's my personal preference. But you can use any particular time frame or frequency that you desire just by typing it in there and hitting a plot. So with that being said, Peter, I will pass it over to you to talk to us a little bit about what we can do with the annotations through the Charting tool.

Peter Janssen: Yeah. Of course. Now thanks for that. And we'll stay with that same theme of being able to really modify the chart that you have in front of you. And I'm going to use this example here with IWM, the iShares Russell 2000 ETF.

And in taking a look at this, what we have is a 2-year time frame on a daily frequency just like Matt had walked us through. Which is why it's important to recognize those things that he's already discussed as far as the zoom functionality, as far as being able to go ahead and get that time frame and frequency that you're looking for.

Now when I say those draw tools, or what you have available, these are going to be more freehand. And you'll find this towards the top left hand side of the chart itself under this Draw dropdown menu.

You'll notice things like the ability to have crosshairs rather than your actual cursor. And you can also go ahead and see the entire suite of drawn objects, such as trend lines, such as support and resistance. And you also have a horizontal line, which will act very similarly to support and resistance lines, as well as vertical lines, and so on.

Now we'll go through each and every one of these, but I will encourage you all to take a look at them in the free time after this actual video is complete. But what we want to actually show is among other things the ability to actually engage a tool, make some changes to it, and modify it.

So what I'll start with is a trend line. For technicians out there, looking at the actual trend itself is extremely important. If you hover over the icon for a trend line and click once, you'll notice that my mouse cursor is now engaged. And what I mean by that is my mouse cursor looks a little bit different. The way that you would actually use a trend line would be able to click once and hold.

So if you were to sort of say have this point, and you wanted to connect it with the next point on a chart, because potentially that is important for you, you're able to go ahead and click once, drag to the point that you want, hold, and then let go, and that is what's going to go ahead and create this line that you now have in front of you.

Now on this 2-year chart maybe you want it to be a little bit more specific. Going back to what Matt had walked us through, you always can go ahead and zoom in. And we have the benefit of hindsight at this point in time, but admittedly, if you were looking at a chart and all you had was information of this nature, maybe you're going to go ahead and then have the ability to have

this in front of you, draw this a little bit better within a reason, and potentially as long as it's holding a particular line, that might give you a particular signal for yourself.

Now you'll notice once my mouse cursor is engaged, you have the ability to go ahead and click once. Once you've done that, you have the choices to change things like the actual color scheme itself. You can change the line style.

Whether you want it to be a solid line, whether you want it to be dotted, or dashed, completely up to you.

You can also change things like the thickness. Maybe you want it to be a little bit more prevalent on the screen. That's going to be completely up to you in your prerogative. But the ability to modify by clicking once is really what I wanted to drive home there.

The other things that we'll say are going to be the ability to extend this line. So we have this anchored from this point here up to this point here. And if you wanted to be able to extend that line out into the future, you have the ability to extend right, you can also extend this to the left, if you see fit. Once you hit Apply, what that's going to then do is carry that same trajectory out into the future as far as it goes.

So going back to that functionality for being able to zoom out. Now that we have that line, let's take a look and see at our price action, well, zooming back in at what had actually taken place. We noticed that it was within reason able to go ahead and hold this trend line that you might have drawn. Begins to falter a bit. We notice comes back, approaches it, and then gets pushed away,

and we see a little bit of this sideways action here at least with this time frame that we've selected.

And that's what gets us to another drawn object which is extremely commonly used. Matt and I probably use this on a daily basis, and it comes up in just about every one on one conversation that we have. Going back to that draw tools, you'll notice the Support and Resistance.

The thought process here, of course, is where buyers and sellers are kind of coming to a meeting of the minds, so to speak. If we look at a support line, I think that you can draw this within reason a number of different places. I typically like to take the approach of where do I get the most kind of touches, so to speak. Where is this line once it gets approached with price action getting some type of a boost or a jump. For me, I'm going to go ahead and drag that there.

This is a bit different. You'll notice that this spans from the left all the way to the right. And once I had it engaged, you have the ability to move this line. But whereas with the trend line, you have to click once, engage, and take to a second point, the actual Support/Resistance lines themselves, you're able just to drag hold and drop them where you want them to be resting on the chart itself.

Now I'll admit sometimes if you're trying to get a very precise number, price point, maybe it's an index point, maybe you want it to be right at 210 on the dot, you have the ability to click once, and here you can actually go ahead and change that value.

So if for some reason you wanted that value to be precisely at 210 even, you don't have to fuss with moving it up or down by clicking and holding, you've got the ability to set it within a close proximity, and then dial that value up with specifically what it is that you are looking to see.

Now I won't be redundant as far as being able to change the colors, the styles, and the thicknesses. But I do know a number of you all out there in the audience don't look at support and resistance as so much of a fine line, maybe you want that to be a little bit thicker, you've got the ability to go ahead and change that thickness or potentially change this so it's not so I guess cumbersome on your chart. Maybe you just want it to be a dotted line so that you get that point across.

So that was Support. Same thought process, of course, with Resistance. If you just try to dial up, well, where did it kind of get nestled in under that trend line, and then also where did it perhaps approach and get rejected from, well, that'd be the thought process of resistance on the chart.

You can go ahead and actually go ahead and change this line style. If you want that to be somewhat similar to our dotted line, make it just a little bit thicker so that it's there on the screen for you, and within reason, that's going to go ahead and get the job done.

Now we notice that, as I mentioned, it does go all the way from the left to the right. To reinforce what Matt had said as far as those time frames and frequencies, if you were to go ahead and actually change this to a 1-year chart, well, it's going to go ahead and have it once again all the way left or right.

If you change it from a 5-year chart, same thing. It's going to go ahead and actually carry it all the way from the left to the right just like any extension of a trend line will do. Essentially, it's going to go ahead and actually take up all of the usable chart space that you've given it.

Which for a number of clients is helpful. They want to actually see if this was previous a support, might this act as resistance in the future. But that's completely up to you. What I wanted to mention was another drawing tool that you can use, which I know we on the desk will quite often.

Let's say that rather than this line going all the way from left to right, you just wanted to kind of encapsulate area from this range starting here, roughly from maybe this point, or perhaps this point. That's when some of these other drawn objects like these rectangles, potentially like the ellipses, or other types of diamond patterns that you can draw come into play.

I'll go ahead and demonstrate this once. If you click on the rectangle, once again, you'll see that my mouse cursor is now engaged. You've got the ability to click once, hold, and drag this shape. As with any of these others, you can drag this from left to right, up, down, completely up to you. Just wanted to show that functionality.

Once you have it drawn, rather than maybe having support and resistance, maybe you'd actually like to have this type of box shaded in. You have the ability, once it's drawn to actually move that anywhere that you would like. But if you want it nestled in, it's pretty easy to see does it act as some type of a support and resistance, or are you just trying to identify more range-bound

price action. That will actually go ahead and make it pretty visual to see when price action escapes to the upside, or as we see here, towards the downside. Now if you click on this, as you can imagine, you're going to have the ability to modify this. And I think you can tell by now there's different ways to modify. Some are going to be very similar when it comes to changing the line styles and thicknesses. But make no mistake, some of these others are going to actually be pretty unique to the tool that you're using.

So this one, we've got the ability to change the transparency. If you were to change that to 90, make it a little bit more, quote, unquote, "see through." All right. Maybe it's not taking up so much or it's so shaded that it's going to obscure other types of objects that you might be drawing or might be considering having added to your chart.

I think we had seen it before, but let's say that you like the look and feel of this range itself in this box and that speaks to you a little bit better, the way that you would actually remove other types of drone objects if you want to do them one by one would be removing them by clicking once, and you'll notice you've got the ability to go ahead and choose Remove.

You can do that, again, one by one, or you also towards the top left have the ability under Draw to actually choose this field here, which is going to clear all drawn objects off of your screen with just one click of the mouse.

What that will do is remove everything that we've taken the time to do up to this point in time. As I click now, you'll notice that that will save some time and effort having to click one by one. Now we've removed the trend line, that support line, as well as that box.

Completely up to you. Just wanted to show a number of different ways to really modify that information that you have at your fingertips. And the list does not stop there. As you can imagine, there's a number of other tools that are here. Completely up to you as to how you want to really harness them for your own decision making. But I thought those are just a couple that we'd highlight so far.

Matt, having that said, I know that there's other things that we want to show, is there anything else in the Draw functionality before we move into Indicators that you would like to highlight?

Matt Davison: Yeah. I'll just mention a couple of things that really these could have been brought up probably at the beginning when we were discussing the settings. So first of all, if we like to go in there and draw trend lines. Right? Like, I'm going to use this example of NVIDIA. And let's say I just wanted to connect over kind of that peak right there, and then this peak right here, and then we wanted to extend that line out to the right. Well, you'll see that it cuts off right where we're at in terms of the current price section. But what if I want to project out into the future? Well, what we can do that.

You'll notice as I take my mouse and kind of hover in between the two arrows here, right at the top, right at the bottom, it puts this gray line. If I click, hold, and drag that to the left, what this will start to do is add negative space to my chart. So this is helpful as we draw lines and we save our charts. Well, how were our annotations holding up. Right? What did our projections look like? And personally in my trade log, I like to take screenshots of the chart at the time I'm entering trades, as I'm going throughout the trade, and looking at,

OK, this is what I thought would happen by this date, here's what it actually looked like. And I save all that in my trade log. And it's helpful to go out there and in my opinion, just notate it.

October 16 I believe is an Option's expiration date. If I can get it to that spot. So if we go in there, highlight that, we can see the specific data into the future. I'm just putting in on October 14 here. Forget the exact date for the monthly Options expiration in October.

But let's say I have a projection that I think something's going to happen by that date, well, I can take a picture of this, put it in my trade log, and then I can monitor it over the next few weeks of trading and see, well, how did it actually go. Right? So that's one thing that's helpful.

We can do that at the top as well. So we can slide this down, give us negative space on the top. You can also do this on the bottom. Right? So we can kind of compress the box here and give us a little bit of room depending on which way the charts kind of angling and what our projection looks like.

We can also tab back and forth. So my usual chart will look something like this. So I usually have a today chart with 1 minute. I have a 15 minute chart. And I'll switch that over to 15 minutes. And of course, these are different charts. This is a very common question that we get, Peter, with the charting feature.

Whenever we're doing a new tab, any annotations or indicators that we add to this tab will not transfer over to this one. We have to add them for each and every tab. It's almost treated like a new chart. And you'll see why here in just a moment.

So we'd have to switch this over to Candlestick and to rename the tab, because it's always going to be untitled. If we double click, we can name it whatever we want to name it. Then we just click off of it

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So I have a 15 minute. I usually as well as that have a daily. And I'll name that Daily. And then we'll add one more tab here. I like to look at the weekly chart as well. And of course, I would switch these all over to Settings. I'm not going to do that now, but depending on your preference, you can certainly do that. And by doing this, we can look at different time frames.

So I usually start on the weekly, then flip over to the Daily, 15 minute chart, and then look at today's action. So that's kind of my natural progression for how I like to analyze it. It's not necessarily right or wrong, it's just my personal way of doing it.

But you can do different time frames and different charts, you can annotate different things. You could have potentially one that's a momentum based tab, one that's a trend based tab, volatility based tab. There's all different kinds of ways to do this. Just know you can make as many tabs as you want basically until it runs off the screen here.

So I wanted to show that briefly, as well as just mention there's a lot of other things here. Some people might find them useful, others might not. There's the Regression tool. Fibonacci's are something that I personally use a lot. Usually like to stick to daily on those.

So just to show what that looks like here. What if we wanted to go from this swing high, I would argue, to that swing low, kind of look at counter trend

retracement, well, we can do that with the Fibonacci tool. And we're going to look for areas where we might expect some supply or demand to come in depending on how we're drawing that line.

We do a whole hour long class on this, so I won't spend too much time on it here, just to demonstrate that it does exist, as well as a lot of other indicators, which I'm about to talk about right now. So I'll clean this up here, and I'll switch this back over to the Candlestick just so everybody can see it clearly. And I'm actually going to get rid of the volume indicator here, the understudy at the bottom. In order to get rid of any of the things I'm about to show you that are understudies, you can just go over here, and you can minimize it, or you can exit out of it.

So let's talk about indicators. We would go up to this tab right over here. And if we're using some of the more common ones, and there's a whole list of the different things that we offer here-- You can kind of scroll through and see all the different ones that we offer.

So you can either look through and go and try to click on the specific one that we're looking for, or if the abbreviation, like SMA for simple moving average, or if you just go up here and you start typing in simple, you'll see all the things that search criteria. So let me go ahead and add a simple moving average. So once we do that, it's going to default to a 20 period moving average. And you have to keep in mind for any indicator that you're using an Active Trader Pro, whether it's a day, or a 15 minute, or a 60 minute moving average, depends on whatever frequency that we have in the bottom here.

So notice that if I use the simple moving average, and I look at what the value is for today, it's 176.30 at this moment in time. Let's say I would switch this over to 15 minutes, well, notice on the 15-minute, it's 151.08. And you could say, well, how could this be? How is my 20 day moving average 176 on the other chart, and it's 151 here?

And the answer is because this is no longer a 20 day moving average, it's a 20 15-minute candle moving average. So it's very important to keep that in mind, when you change the frequency, it's altering the calculation that's being done up here.

Let me switch this back over to daily for just a moment. So like Peter showed us on the annotations, we can always modify this. So if we want to change the color, line thickness, the style, we can do that here. We can also change the source of, most people use close for a lot of these things. But if you have a reason to use something else, you can do it here. And you can also change the period. So very common. Right?

People want to know, well, what's going on between the moving averages that are faster and slower. Well, we want to get a 50 moving average, we just need to add another moving average, you'll see it defaults back to 20. Well, we're going to modify this and we'll change 20 to, let's say, 50.

And when we do that, you'll see it adds a 50 Day moving average for a line. And we can do this process as many times as you want. And we can put another moving average on there. And let's say we wanted to use the 200, very common set up, 20, 50, 200, well, now we have all three.

And again, you can change the colors, thickness, or style for any of these just how you like. And for our personal charts, I know we all have ribbon charts where we're looking at a ton of moving averages and how they're interacting with one another. So very useful.

That's an example of a trend indicator. Again, if we want to delete any of these things, we can just go in there and delete them. We also have a variety of momentum indicators. Let me just show one that's pretty common, RSI. So again, I got that just by typing in RSI right here. If you don't know that offhand, of course, you can always just scroll through again and look for the ones that we're looking for, and you'll see relative strength index would show up right here and we could add another one if we wanted to.

But let's just leave that alone for right now. We'll get off of the volume. And if we ever want to see a better view of this, because this is a little difficult to see, we can always take the line right here and expand it up. Obviously that's going to make our price chart smaller, but it's going to make our indicator understudy larger. And we can see different things here. Right?

So we see, in this case, this is an oscillator. So we have an overbought level at the 70, we had the oversold level at the 30, and it tends to oscillate back and forth between these levels with sometimes breaking out of it. So we can change those levels.

So let's say we think we're in a strong bull trend, and we don't think that 70 and 30 is appropriate. Maybe we want to change that to 80 and 40. Well, we can do that. And you'll see that I'll adjust the lines up for us.

Now I would argue in this particular chart, it's certainly not a strong bull trend. So maybe we want to do the opposite. Maybe we want to adjust overbought to 60, and move our oversold the 20, well, we can do that. Right? And we can see if that's a more appropriate level.

And that's going to be, again, on a chart by chart basis point. Here is going to show you how to use the tool as much as to show you that they do exist and how you can modify them. Again, we have classes on all these specific things. We can change the period, all of the colors for the lines inbetween, thickness, style, just like anything else. We can also change the opacity. And this is going to be really helpful. Right?

So if we start changing this, you'll see that once we get above the oversold level, well, it's going to start shading that end for us. Right? And some people would like to look at these levels. And then maybe we want to add a whole other RSI, the bottom RSI 2. And maybe we want to leave the 70 and the 30 levels here, and maybe we're going to shade that opacity even a little bit more. So let's do 80% there. And you can see, well, if we ever get above 70, it gives us that different shading, between 60 and 70, the shading and then everything in between is just going to be the normal RSI. So you can add layers to see different levels on the same potential indicator.

So that's an example of a momentum indicator. Really common, volume one. So we looked at regular volume, again, by Settings, and just going to show volume chart. We can go to indicators, we can look at something like On Balance Volume, OBV, and you can see how this will pull.

Basically this is just an accumulation of the volume. It's a daily cumulative total. It goes up or down based on the closing price of the stock for that particular

day. And just like we can draw on the chart, well, we can draw on our understudy as well. Right?

So what if we want to see, hey, is this confirming or is this potentially showing accumulation here? Well, potentially, at this point in time. Right? The stock was kind of moving back and forth. But we see on updates, volume was getting stronger. Right? So we're starting to see this accumulation. And what would you potentially be looking for? Well, this is a possible way that we could use confirmation. Right? So are we breaking out of a certain spot, or as we notice here, we start to break the trend and the volume, and well, what does this starting to do right here? As we're doing that, we're starting to give up a little bit of the shorter term trend after the burst up. Right?

So could be using this in a number of different ways. Again, the point is not to go through all of the indicators themselves, but to actually just show you what we can do. So we can annotate these understudies just like we would a regular price chart.

Another very common thing to use, basically I'm going to show one of each here of the different families of indicators, Average True Range, which is showing us the volatility for the security, ATR. So basically what this is looking for is what the average true range of the security has been for the last 14 days. Again, we could modify that. What if we want to only know the last week of trading? Well, you can switch it to five. What if we want to know more than that? What if we want to know the last month of trading, typically 20, 21 days in a trading month, we can expand that out and see what it would be. And you can see, as of right now on average for the last 21 trading days, NVIDIA is moving \$8.54. So this is showing us as the price begins to expand in either the

up direction or the down direction, volatility expanding for this specific security, as it tends to slow down and price is starting to contract and operate in a more narrow range. We can see this contracting. And again, sometimes can be a little difficult to see. So maybe we want to expand that out. Again, we can annotate on this just like we would any other price chart.

Final thing I'll just show here as far as the indicators go. Just wanted to look at one other version of volatility, which is going to be the Bollinger Band. So Bollinger Band's another way of looking at volatility. Very common one. So just wanted to show what this would look like.

So a lot of people would like to just look at it exactly how it is with the actual shading in between. Of course, I don't personally like the opacity, so I turn it all the way off. I usually go 0. And we can leave the color exactly like we have it, or-- I prefer Black personally. So I like to look at it like this. And we can also change the standard deviation. So right now we're basing our calculation on two standard deviations above and below the 20 period moving average. That's the rules for this particular indicator.

Well, what if we wanted to know what's going on with three? Well, we can do that. And you'll see that it expands our bands. Right? So we can manipulate different calculations within the indicators as well. They all have their specific rules and guidelines.

The kind of next steps here. If you're watching this and you're saying, hey, I don't maybe know everything I'd like to know about the technical indicators, but I want to learn more, first of all, I'd encourage you to, again, attend some of our technical analysis classes. We offer them weekly.

As well as if you're looking for a resource on what some of these things are, if you come up to the Help button in the upper right corner, and then we go down to things that you should know about Active Trader Pro. Sorry. Let's go to the Learning Center. And then you go to the Technical Indicator Guide is what we're looking for right there. We click on that,. It's going to take us to this list. And it's going to do a couple of things.

So first of all, you'll see all the indicators that we have in Active Trader Pro, they're going to show up here. Maybe you're wanting to learn about Average True Range. You just saw that one, but you're not exactly sure what it is. Well, you can click on it. You can see that it's in the volatility family. It will tell you an overall description. It'll tell you how it works. As well as the calculation. So it gives you an overview of the actual indicator itself and how you one might use it to further their analysis. And again, those classes are going to be kind of the next step. We'll show you how to use them with live examples. So with that being said, Peter, I'll wrap it up there as far as the indicators go. I'll let you take us through the next thing.

Peter Janssen: Yeah. Absolutely. And I'll go ahead and grab the screen from you.

But I think that was extremely important. I'm going to go ahead and jump into a few other things that we can look at. But before I do, what I tried to do was actually mimic a number of those different indicators that you went through. By all means, folks, this screen is going to look a little bit busy. I've got those indicators that he had done, such as RSI, with the modifications that he had made, I've got On Balance Volume, Average True Range, the moving averages that he made, those different customizations too, as well as those Bollinger Bands.

And this, as I've mentioned, might be a little bit busy, but what I wanted to also show in regards to the tabs was just like Matt had shown us, if you click on adding a new tab, what that's going to do is then put you back to the drawing board. It's going to go ahead and go back to those default settings. Now you have to go back through the indicators themselves, adding them, modifying them, changing the settings, this, that, the other.

Rather than doing that, it's completely your prerogative, perhaps you want that clean, fresh, default type of chart at your disposal. I just wanted to go ahead and highlight the ability that if you hover over an actual tab itself and then right click once with your mouse, about 2/3 of the way down, you're going to have the ability to Copy Current Tab. And why is that going to be important? Well, let's see. If you click on Copy Current Tab, what that will do is give you a mirror image of everything that you had done. It's going to give you the exact same time frames, frequencies, chart settings in the background as far as the candlesticks versus the bar chart, it's going to have those indicators. And not just the indicators, but all the modifications that you had made to it. Now you probably don't want a 2-year chart, a 2-year chart this, that, or the other. But what that can do is save you the ability to go ahead copy a duplicate, and then let's say you want that same look and feel, you want it to be a 6-month chart, maybe you want it to be a 3-month chart with all that same information.

Now just as Matt had walked us through, you can go ahead and perhaps name this 3-month. I find that that can be quite a bit easier. That way if you are the type that likes to have lots of these indicators at your fingertips, or perhaps you look at very similar indicators, such as moving averages, maybe not all of these

others, perhaps you don't want to see On Balance Volume, that much of a granularity to it.

Maybe you don't want to see Average True Range, but maybe the moving averages and the Bollinger Bands is going to be helpful. You've got the ability very quickly to once again copy current tab, kind of get credit for all the work that you have done, and then maybe remove certain things which sometimes can be easier to remove than actually have to go back to square one and add everything.

So I wanted to highlight that for just a moment. But let's get back to just a kind of clean chart here, so to speak. This is more or less a 5-year time frame on Apple. And the reason I wanted to go to something so far back in the past was looking at the events.

Once we click on Events, you're going to notice that you can add things like whether the company has had a split in the past. We notice the actual icon itself appears. We've got this blue icon for the S itself identifying a split. You can do this for dividends. You can do this for earnings. You actually see one for tax lots as well.

And what this will do is show that if you have previous closed positions, whether those positions were closed at a gain, whether they were at a loss. Do a little bit of homework. Maybe being able to identify that on a chart could show that you took profits at an ideal time, or maybe you left a little bit on the table to the upside, or perhaps you actually closed out of position at a manageable loss and the position would have gone tremendously against you.

So those tax lots themselves can kind of put you back to doing a little bit of homework and reflecting on decisions that you made. Maybe there's room for improvement that you can learn from, or potentially you made a great decision and you can pat yourself on the back for it.

Now once the icons appear, let's for instance, take a look at this. If you hover over it, it'll tell you the date, and that it was a 4 for 1 stock split. Same thing with dividends. If you hover over a dividend, it's going to tell you what the X dividend date was, the pay date, as well as the amount.

Here if you take notice, the amount was actually \$0.82. Now if you didn't have that split icon there, just dividends, and you saw that here this quarter, it was \$0.82 and hovered over the next quarter to see that the dividend was just 20 and 1/2 cents, well, that might not add up.

But of course, think about that split. Here we see once again that 4 for 1, OK, \$0.82 just divided by that 4 factor is putting that dividend right on par. It's not that the dividend actually got cut or anything of that nature, it's just getting actually adjusted for the split that had taken place in the interim. Which is why I think oftentimes those icons can be very, very helpful for a number of different reasons.

The other question that we commonly get on this page, Matt, is going to be, well, I see a E here for the Earnings. Does that mean that they missed? I want to be clear, and you can look at this on the actual Help menu itself, but whether this represents station for the E is either this diamond pointing downwards, or whether it's the green E with it pointing upwards, doesn't have to do with whether it actually beat expectations for that quarter, what it's

actually doing is looking at what earnings was in comparison to that earnings cycle one year ago.

So here we see an earnings per share of \$1.24 with a green arrow pointing upwards. That was for the October 28 cycle. If we were to go back here where we had seen this, well, \$0.73. OK. So in comparison, \$0.73, we've got \$1.24, well, \$1.24 is higher than this \$0.73 was, which is why this is going to be highlighted in green.

If you were to go back to this earnings, let's say, or actually need to back it out a little bit more, you would notice that \$0.73 was less than the earnings previously that we had observed. So that's just one thing I wanted to clear up. It's not necessarily whether that earnings had beat that current quarter, but how that current quarter was in relation to what it was the year ago.

Another couple of things that you can do. Obviously you can Select All, or Unselect them, is going to be this comparison functionality. Oftentimes get the decision as far as the capital that you have, well, what do I want to put my assets to work in? Do I want it to be an individual name? Do I want it to be an ETF? Some type of perhaps index fund?

And the choices are going to be endless. Which is why the Compare functionality is very helpful, whether it's going to be company to company, maybe company to its industry or sector, or perhaps even a sector in comparison to maybe a broad based index. And what you're looking for is being able to compare the two.

So what we can do here is actually have Apple on our chart. And let's say that you wanted to compare it to the S&P 500.

But once you actually click that Compare, what you're going to notice now is we still have Apple's chart here in the background. And it's going to go ahead and actually add a line chart of the S&P 500 starting in the same axis, essentially that same point, same line in the sand.

Now you notice, of course, there is a bit of outperformance from Apple to the S&P over that five-year time frame. You can certainly shift that perhaps to 2-years to get a little bit different of a look and feel here. You can also go ahead and actually click on this Modify, and the things that you can modify, among others, the colors as we had shown, those styles as well.

Now let's say that you want to actually have the ability to see, well, rather than just these percentages, I want to see what the price of Apple or maybe the index point was for S&P 500. When you come back to Compare, you have what you see here as far as dual axis comparison.

When you do that, you're going to go ahead and notice Apple's price points here on the right hand side on one axis, and off towards the left, you're going to have the index here represented by the S&P 500 as well to really go ahead and see where those were. And it's going to give you a little bit different of a look and feel on the chart.

The whole goal, of course, is to see whether there is a little bit of outperformance, potentially, for one product over another. I won't cycle through all of the different kind of ways that you can do this, as I mentioned, for the ability to do it between sector and company, maybe sector and industry, sector and index, you name it, the list goes on and on.

You're also not limited to just one, you can actually go ahead and actually enter up to 25 different symbols. So if you wanted to see how Apple stacked up against perhaps an index, maybe its own industry or sector, you can do that, and that's just going to cast additional lines here on your screen.

The last thing as far as comparisons I wanted to draw home on was something that Matt kind of walked us through previously as well. Housed under indicators, one of these that's going to be dynamic is the ability to type in Relative Strength Comparison, or RSC.

It is different than RSI. He had walked through Relative Strength Index. This is a little bit different. Relative Strength Comparison is actually going to look at the price of one product versus the price of another. Don't really concern yourself as much with the kind of scale that you're seeing on the right hand side, it's all about really the trajectory.

And what this type of indicator can show you once you have a comparison launched is this. Well, if you see that there is a time where this line is beginning to actually wane and trend lower, what that tells you is that the actual product that you have, in this case, Apple, is going down. It's underperforming what you have at compared to.

Now sometimes on the chart it's going to be a little bit clearer to see. Other times what you'll notice is-- Let's take this instance. If we were to go ahead and kind of add these vertical lines that Matt walked us through, if you were to look from this point perhaps over to this point here, well, you can see that Apple's rising and the index is rising as well.

Both of these are going up. You can tell that from looking at the chart. But if you wanted to actually see within reason, OK, which one is outperforming perhaps more, that is where this trajectory actually comes into play, showing that Apple relatively is going up at a faster clip than what you have it compared to, in this instance, the S&P 500.

So I thought that that was an example as to maybe some of those indicators that you see do need to have this compare functionality actually launched. But I know that there are a number of studies that purely look at Relative Strength Comparison as to how they make decisions on cycling into and out of products. So Compare is certainly one that is used quite a bit, and definitely wanted folks to have the ability to feel comfortable and confident using that type of tool itself.

Matt, thoughts on that? Anything to add, or what more can we take a look at here within the chart?

Matt Davison: Yeah. I'm just going to jump in to kind of the final thing that we're going to show before we talk about saving the chart, and that is the technical analysis that's powered by Recognia.

So this is going to be a third party group that actually provides some algorithmic way to study the chart, analyze what's going on. So Peter mentioned support and resistance prior to looking at some of these other tabs, well, we can actually look at that through Recognia. Right? So if we click on the Support/Resistance underneath Technical Analysis, you'll notice that it's going to put this green line up here for resistance, and the blue line here for support.

Now a couple of things to note on this. Right? First and foremost, is just because an algorithm is picking up that these are the particular levels doesn't mean they're the end all be all. I mean, I like to draw my own and then oftentimes compare with what's going on with the Recognia. You also have to keep in mind the time frame that we're looking at.

So if you actually left click on these and you hit Modify, you'll notice that they're using short term, intermediate, and long term. This particular one is short term, and it's identifying 153 and 181. So we're getting pretty close if not maybe even slightly underneath that the current level of support.

Which I would tend to roughly agree with that. That's an obvious area here. You can see a couple of touches. Peaked its head beneath. And that's more or less back towards the beginning of July where it found the bottom and was able to push higher. And you can see it was looking like that was definitely resistance. So I'm pretty good at agreement here. Might draw it slightly differently if I were looking at it manually, but tend to like that.

If we switch it over, sometimes it'll give us a different line for short term, intermediate, depending on how much price action has occurred. You'll notice nothing actually changes when we switch it over to short term. But if we go over to long term, notice that it's going to leave our resistance alone, but are supports going to change. Let's just look at that for just a second here.

So if we switch it over to long term, first of all, it's incorporating more data points into the calculation, and it's using all sorts of things. Right? Pivot points, I believe it looks at Fibonacci levels-- All sorts of different things are plugged into this to generate these two lines. And you can see looks pretty good.

Right? Maybe we even could go back to more of a 5-year chart and potentially

look at this, and you can see support kind of was using as resistance, broke above it, kind of oscillated back and forth between the line, tried to push off of it, through a little bit, retested, and then finally broke it, and retested from the top so resistance becoming support.

You can definitely get the idea from where the algorithm is generating this idea. So we can look at different time frames and basically get an algorithmic sense of where levels of support and resistance might be. So that's the first thing that we can look at. And if we want to get rid of that, we just left click on any of these lines here, hit Delete.

We'll go over to technical analysis stops. So we can look at potential areas. And you're going to notice this one is pretty similar. This is looking for levels that if we're in a long trade, where underneath would be potentially be looking for some places for stops. And we can do this based on tight, so this is going to move us hopefully closer to the current price action, medium, which is what we just had on there. We could even potentially look at loose, which is going to give us the furthest. And you'll notice it kind of puts it on the bottom end of this kind of range that we were looking at at the end of 2020.

So gives us some potential ideas. Just like support and resistance. Don't think that just because we see a line here at 124, this is exactly where I should be putting my stop. I'd have to ask myself, Peter. If I'm looking at this-- We're at 150 approximately right now on the stock. And the stop is all the way at 125. So it's a 25 point difference. That's basically one sixth of the value of the current stock.

I have to ask myself. Right? Am I really willing to lose 17% on this from the current level before I decide to take action and sell. I mean, everybody has to make that decision for themselves. But I always just like to point that out when we're demonstrating these, it's not trying to solicit this is exactly where you should be putting your Stop, it's just trying to give you an analysis framework for how to think about where you're currently at on the longer term chart. So always like to show those. We can also look at this from a-- So that's the long side of it. We can also look at it from the short side. Right? What if we short it at a certain point, well, where are some spots where we might be looking to buy this back if it starts to move the opposite direction out of this kind of Downward pattern. And we can do the same things. Right? As we move it over to medium, it's going to move it a little bit closer to the current price action, tight, it's going to move it even closer.

So we're looking at 164, currently at 150. So again, we can use these as potential ideas for looking at places where we might consider taking protective action on a current position if we're looking at it from the perspective where the current stock price is.

So final thing I'll show here, let me get rid of this tab here, is the technical analysis in the patterns and events. So if we go over to Technical Analysis, Patterns and Events. If we highlight everything here, so short term, intermediate term, and long term, and then we select all of these, we have all sorts of things.

So classic patterns. Talking about triangles, or rectangles, or diamond patterns, continuation, wedges, all that stuff is going to be in this column right here. Candlestick and multi bars. So these are our short term patterns that it's

potentially looking for. Our oscillators. So RSI is an example of that. We have Stochastics, Bollinger Bands, a lot of the different indicators that are kind of ebbing and flowing between certain levels. Then we have indicators themselves, basically moved on the idea of a moving average crossover. So we can select all of these. Let's just hit Apply and show you what it looks like here. So as we go through, and let me maybe zoom in on some of the more recent price action. So as we go in there and look at some of these different things, you can see all these different signals. And if you just hover over it, it'll tell you what the actual signal was.

If you want to add it to the chart, you can go up there and do that. So if that's Stochastics, you don't know what it means? Click on View Details, and I'll tell you exactly what it's talking about. So it kind of explains the event, whether it's bullish or bearish. It will explain what the actual algorithm was picking up. So was it crossing above a certain overbought? Below an oversold? Was one line crossing over the slower moving average? All these types of things.

The other thing that I find really interesting about this, and I'll try to highlight it here with the example, is it'll highlight actual charting patterns. So if you're not great at it, and I know this is kind of one of those things that it's difficult to initially pick up, because effectively with the human eye, you're going in there and you're trying to look at all this noise and say, hey, is there a pattern I can pull out and decipher and annotate on my chart. Well, this will do some of that for you. Right?

So you see this downward price action that it's had, and I know it's identifying it from here, but I would argue personally this really had started at the end of March, and we kind of started this downward pattern. And then what are we

run into? What we run into what we would call a consolidation pattern, which is basically where price is kind of stalling. And then in this particular case, it's a continuation wedge.

So why is it calling it that? Well, it explains it for us. Right? If we go and click View Details, saying, after a temporary interruption, the prior downtrend is set to continue. And the reason why is because, well, we notice 8/8, is the date that we're looking at here, gives you a closing price as well as a target price range, gives us a range here, pattern duration, inbound trend duration. Well what's it actually picking up we go to 8/8, well, you can see we were in this continuation wedge, and then we had a clear break to the downside. Right? So that's what it's identifying there for us. We can use this in a lot of different ways. So I think it's a great tool.

Again, is it something by itself to base a trading idea on? I don't think so. Right? There should be more analysis. You have to identify what do you think trend is doing, what does momentum look like, any other indicators that you may be using, looking for that idea of confluence. But it's a really good tool to generate some trading ideas that should then be more thoroughly analyzed and advanced before you actually place the trade.

So that's what we can do with the technical analysis. And Peter, I know we're wrapping it up here. I'll turn it back over to you, because obviously we've done all this work, we've shown you what we can do, maybe we've made a ton of annotations, we don't want to forget to do the savings. So I'll turn it over to you to close us out here.

Peter Janssen: Yeah. Absolutely. I'll go ahead and grab that for just a moment. And like Matt had said, being able to save the actual chart itself, it's a little bit unique, not that it is difficult. Just want to go in and emphasize that once you've done all this work, I always use that term, kind of give yourself credit. Get credit for the time and effort that you're putting in, rather than having to rebuild this.

Just as Matt had shown us previously, we've got a number of different charts that are saved here within the actual test account itself. I'd encourage many of you to do the same thing, whether you're utilizing different tabs within different charts, or perhaps different charts are going to give perhaps a different look and feel, maybe a different context, a different lens to be able to view price action. I think having numerous charts can be extremely helpful. So as far as actually saving the chart itself, you'll see it's here with this icon. It is a floppy disk icon. Once you click on that, you'll notice you'll have a check mark next to the current chart that you are on. Among other things, you can delete charts that you no longer are looking to use.

But what we want to drive home here is towards the bottom, you'll notice Save Chart. You're going to notice here the actual name itself. You can make it your default chart, if that is the one, that when you click New Chart, you want to see pop up first and foremost.

And then, you also have the ability to check or uncheck whether you want those chart settings to be saved. Those are going to be things like the grid lines, that watermark opacity, it's going to be whether you want to see that candlestick or bar chart format, you name it.

The indicators themselves, that's going to lend itself to being able to actually save on each and every chart. Have these moving averages. Have those Bollinger Bands, or RSI that you're seeing down below.

The events is more what I had walked through, going through the ability to view different tax lots, splits, earnings, dividends, you name it. And then lastly, the time frame and frequency which Matt had shown us, emphasizing the fact that you want this chart to really retain perhaps a 1-year, daily look and feel, or maybe you want it to be a 5-day, 5 minute chart. Completely up to you. Your prerogative. You have the ability to check or uncheck these things.

Once you are happy with what you're seeing, you can go ahead and actually click on Save. It's going to give you a prompt if it's the first time, as you're going to be actually having it added, and if it's something that you want to actually replace over, you're going to have this prompt, Yes, go ahead and copy and save what I have done, or No, I don't want to save that.

So saving the actual chart, I just wanted to distinguish between the differences here. You need to save the chart in order to go ahead and save all of these things that we've worked on today, whereas saving the actual layout itself is just going to go ahead and have a chart appear in this space.

And I can't tell you how many clients I've spoken to in the past that really want to impact that, emphasize the fact that saving the chart itself is one thing that you want to do early and often. Once you get in the habit of doing it, you'll be able to create numerous charts that's going to save you time and effort far out in the future for years to come.

I appreciate the time and effort here, of course, in being here. Matt, thanks for having me. If you want to go in and sign us off, I know you have been here for all of these sessions. Thanks for allowing me to take part in a couple of these. I always enjoy this. And think that clients, whether you trade actively, or just getting started with investing, can really take a lot from sessions of this nature. So I appreciate being here.

Matt Davison: Yeah. Absolutely. And that'll pretty much wrap up what we wanted to cover here in session 3 regarding Charting. I just wanted to leave with the final note, because I've been mentioning all these classes that we offer throughout the week.

If you go to Fidelity.com, you go to News and Research, and then down to the Learning Center, that's what you want to click on, once you're on this page, you're going to scroll down about halfway and you'll notice this Daily Trading and Investing Coaching Sessions tab.

So if we click on that, first of all, we have a number of different types of sessions that we do, market briefings, Options trading, trading tools. But the one I want to highlight here is the technical analysis portion.

If you click on Find a Session, that'll take you to this page. And this is where we're going to break down and use a lot of these different things, so VWAP and volume profile, we have that coming up, it looks like tomorrow, as well as a couple of other things.

So definitely encourage you to check those out, as well as our market briefings. Basically that whole time is spent charting and using the charting tool. So we invite everybody that's watching this to definitely come and join.

END OF AUDIO FILE

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