



## **Q4 & FY 2021 Earnings Call Script**

**Tuesday March 8<sup>th</sup> 2022**

### **Presenters**

Tejal Engman, Senior Vice President Investor Relations

Mark Zagorski, CEO

Nicola Allais, CFO

### **Q&A Participants**

Youssef Squali – Truist Securities

Raimo Lenschow – Barclays

Arjun Bhatia – William Blair

Laura Martin – Needham & Company

Michael Graham – Canaccord Genuity

Vasily Karasyov – Cannonball Research

Matthew Condon – JMP Securities

Yun Kim – Loop Capital Markets

Matthew Swanson – RBC Capital Markets

Stephen MacLeod – BMO Capital Markets

Mark Murphy – JPMorgan

### **Tejal Engman, Investor Relations:**

Good afternoon and welcome to DoubleVerify's fourth quarter and full year 2021 earnings conference call. With us today are Mark Zagorski, CEO, and Nicola Allais, CFO.

Today's press release and this call may contain forward-looking statements that are subject to inherent risks, uncertainties and changes, and reflect our current expectations and information currently available to us, and our actual results could differ materially.

For more information, please refer to the risk factors in our recent SEC filings, including our annual report or Form 10-K.

In addition, our discussion today will include references to certain supplemental non-GAAP financial measures, and should be considered in addition to, and not as a substitute for, our GAAP results. Reconciliations to the most comparable GAAP measures are available in today's earnings press release, which is available on our investor relations website at [ir.doubleverify.com](http://ir.doubleverify.com). Also, during the call today, we'll be referring to the slide deck posted on our website. With that, I'll turn it over to Mark.

## **Mark Zagorski, CEO:**

Thanks, Tejal, and good afternoon, everyone. I am excited to share this update with all of you today, which continues to expand on our themes of exceptional growth and market leading innovation.

Before we begin, I would like to take a moment to acknowledge the global humanitarian crisis in Ukraine, our support for all of those affected, and our unwavering commitment to our customers, partners and colleagues around the world to stand for truth and transparency.

First, as a quick snapshot of our recent growth, in the fourth quarter of 2021, we delivered 106 million dollars of revenue and 38% adjusted EBITDA margins, ending a year of exceptionally strong execution on a high note. In 2021, we measured 4 and a half trillion ad impressions, resulting in record revenue of 333 million dollars, an increase of 36% compared with a year ago. We grew faster than the digital advertising industry and significantly outperformed the industry's programmatic, Social and CTV growth trajectories while generating 33% adjusted EBITDA margins.

We completed strategic acquisitions of Meetrics and OpenSlate, and successfully continued to evolve our customer value proposition from protection to performance with the launch of two new identity-independent performance solutions that do not rely on third-party cookies or persistent identifiers, DV Custom Contextual and DV Authentic Attention.

Building on the update we provided at our Investor Day on February 25th, I will discuss the current and future scaling of our business, within the context of our five key growth drivers, which are:

1. Product evolution
2. Channel extension
3. International expansion
4. Current client up-sell and cross-sell and new client acquisition and
5. Strategic M&A

Nicola will then discuss our fourth quarter and 2021 results as well as our outlook for 2022.

Beginning with product evolution, our expansion of pre-campaign activation solutions that drive performance continued to be led by Authentic Brand Suitability, or ABS. ABS was the largest driver of revenue growth for our Advertiser Programmatic business. ABS revenue grew 77% in 2021 and contributed approximately 85 million dollars to our topline. For most of last year, ABS revenue was fueled by continued customer adoption and volume expansion on major buying platforms, most notably Google's DV 360 and The Trade Desk, where it was launched in 2020. Considerable ABS growth also came from upgrading current clients to ABS as well as selling ABS to new clients at the outset of their relationship with DV.

While a significant majority of our Top 100 clients are now using ABS in some applications, their usage of the product tends to be in North America, where programmatic buying is dominant. There is a substantial and growing opportunity to upsell ABS to our biggest clients in their international markets, where adoption of this premium performance product has just begun. In the fourth quarter, for example, we activated ABS with Disney in Latin America, Colgate in EMEA and Nike in 21 global markets. We have just started to scratch the surface of ABS growth with current clients in markets outside of North America.

Beyond our top 100 customers, approximately 40% of our top 500 clients still do not use ABS in any market, representing a solid expansion opportunity among this established customer base.

We are focused on making ABS, and all of our performance solutions, an integral component of an unmatched suite of independently accredited, pre-campaign activation and post-campaign measurement tools that drive better outcomes for advertisers.

While we are discussing DV's programmatic activation products, I would like to highlight our MRC pre-bid accreditation announcement made last week, establishing DV as the only provider currently accredited for predictive viewability targeting as well as property-level ad verification, inclusive of brand suitability and contextual targeting within programmatic media campaigns. To put it simply, we have the only fully accredited programmatic suite in the market today. We expect this unique differentiator of DV's programmatic solutions, including ABS and DV Custom Contextual, to further drive our programmatic sales momentum and support DV's overall RFP win rate, which was 80% in 2021.

Beyond our core programmatic solutions, we are excited about the growth opportunities with our newest performance products – Authentic Attention, Custom Contextual, OpenSlate's pre-campaign social targeting tools and our audience verification solution with Comscore. Today, let's dig deeper into two of them - Authentic Attention and Audience Verification.

DV Authentic Attention, which you will be hearing a lot about over the next few quarters, builds upon the baseline quality and safety metrics established by the DV Authentic Ad. For ad impressions that meet the standards of the authentic ad, attention measurement provides a real time, impression-level view of engagement and exposure which allows advertisers to optimize media based on what's resonating most with audiences. As traditional performance metrics like reach and frequency lose their efficacy due to privacy and policy challenges, we believe that attention will be the next currency that advertisers rely on to drive outcomes.

Our go-to market strategy for Authentic Attention leverages DV's established customer base of over 1,000 leading brands to drive ubiquitous uptake of these new data sets. We essentially have a built-in pool of trial customers. In Q2, we will provide a preview of attention metrics through Pinnacle to all customers that use the DV Authentic Ad - exposing the biggest brands on the planet to the performance solution of the future.

Today, we are the only leading verification company to have built and launched a comprehensive attention solution. We have already secured accreditation for Fully On-Screen measurement, an attention metric specific to CTV, and we will continue to expand our lead in accreditations of all our attention metrics over time.

Turning to our upcoming audience verification solution, we are excited to soon launch a market-leading product in partnership with Comscore. By using audience verification, advertisers will be assured that the cross-platform audiences they are measuring are free of invalid traffic, delivered in view and to the right geography and brand environment. This is an industry-first measurement solution that combines media quality verification data with audience data to help advertisers maximize campaign performance and drive real business outcomes. We expect to launch the first iterations of this evolving joint offering for a select group of customers as early as the second quarter of 2022.

Moving on to our second growth driver, channel extension, we are excited about our continued growth in Social and CTV. Social revenue grew by nearly 50% in 2021, with strong performance across Facebook, YouTube, Twitter, Snapchat and Pinterest, as more than 300 new advertisers activated DV's Social media verification solutions last year. We believe the prospects for Social growth in 2022 and beyond are exceptional for two key reasons.

First, we are expanding our solutions and coverage on both emerging and leading social platforms, including TikTok, Twitter and several others.

And second, we have accelerated our product roadmap in Social through the successful integration of OpenSlate's pre-campaign social activation solutions into our sales process providing an expansion opportunity with all existing DV customers and prospects.

Beginning with TikTok, we continue to expand coverage of our viewability solution, which is now available in 67 countries. Our solution has been used by nearly 30 advertisers, resulting in average monetized impression growth of approximately 220% over the last six months. On Brand Safety in TikTok, DV's advertiser activated brand safety controls continue to expand and have now been rolled out in North America, UK, Australia and the Middle East with 82 advertisers using the solution. In addition, we continue to develop end to end, in-feed solutions in conjunction with TikTok.

With coverage of viewability, fraud and in-geo as well as our brand safety controls, DV offers the most comprehensive measurement and activation product offering across TikTok today.

On Twitter, we are developing a brand safety and suitability measurement solution for Twitter's newsfeed, known as Timeline, and expect to launch this in the first half of 2022.

Moving on to pre-campaign Social solutions that we are integrating into our platform via the OpenSlate acquisition, we're actively working to capitalize on both immediate and long-term revenue opportunities. We have begun cross selling our combined pre-campaign activation solution to DV's expansive global customer base. Our research demonstrates that when our pre-campaign activation Social solutions are paired with our

post-bid measurement products, we can deliver significantly improved outcomes for our customers. On YouTube, we saw that when our pre-campaign activation solutions are applied to campaigns, brand suitability incidents are reduced by up to 50%. We expect to be able to drive even better advertising outcomes for customers as the operational integration progresses.

On CTV, our impression volumes grew 57% in 2021 and by the fourth quarter, 25% of our tag-based, advertiser video impressions were CTV. In essence, 1 of every 4 of DV's open internet video impressions are attributable to CTV, over indexing relative to CTV's share of digital video across the industry, and underscoring the growing importance of verification in this fast-growing sector.

Our CTV products are becoming essential to advertisers because fraud and viewability are emerging as real challenges to advertiser media investment confidence.

Fraud continues to violate unprotected digital transactions with increasing incidences of counterfeit SSAI servers generating fake CTV inventory across countless apps, IPs and devices. As recently as last month, DV discovered a new scheme that we have dubbed Viperbot, which strips the code that verifies ad impressions and then conceals and redirects this code through real devices to hide the fraudulent activity and attempt to go undetected. DV customers are fully protected from this scheme, which continues to spoof more than five million devices and over 80 million ad requests per day, undercutting ad investments and undermining performance.

In addition to fraud, viewability, which has generally been assumed by CTV advertisers, is also being challenged in CTV. In a recent study, DV discovered that 1 in 4 analyzed CTV environments continued to play programming content – including recording ad impressions – after the television was turned off. The ad was delivered, but certainly was not viewed, rendering performance measurement invalid and diverting media investment.

To combat this latest viewability challenge, last month DV launched Fully On-Screen pre-bid targeting, enabling Connected advertisers to target inventory from sources that are tested and evaluated by DV to ensure ads are only displayed 100% on-screen and when the TV screen is turned on. Through this first-of-its-kind solution, DV complements our post-bid measurement capabilities with pre-bid targeting, empowering programmatic advertisers to address CTV viewability challenges across the media transaction. DV Fully On-Screen pre-bid segments are available on Amobee, MediaMath and Microsoft's Xandr, with more media-buying platform integrations forthcoming.

In addition to these leading CTV solutions, DV is the first and only verification provider to provide effective brand suitability controls in CTV environments. We currently offer CTV app inclusion and exclusion lists and app level controls that are utilized in both monitoring and active pre-bid avoidance. And, we will be launching content-level classification in 2022.

Shifting to International Expansion, international revenue grew by almost 70% last year with APAC revenue growing by 84% and EMEA by 61% - all outpacing the industry and

our competitors. International now contributes 26 % of our overall Direct revenue. We currently generate revenue in 93 countries and from our expanding base of 20 locations outside of the United States, we will leverage our exceptional RFP win rate to take advantage of the expansion opportunity that exists in markets around the world. In 2021, 55 % of our headcount growth was driven by international hires as we continue to invest in expanding our global presence.

Turning to client upsells and new client acquisition, we signed 176 new advertising customers in 2021 including brands such as Target, Geico, Diageo, BMW, Bumble and Apple Services. 61% of our new logo wins were greenfield, while 39% were competitive wins. In addition, on the supply side of the business, we added numerous new platform clients such as Amazon, Taboola, Adtheorent, Smartclip and Verve as well as 19 new publishers to the fold. The platform and publisher businesses are additional great examples of how we can extend our core data assets into entirely new revenue lines.

With regard to our final growth lever, strategic M&A, the integrations of Meetrics and OpenSlate are progressing well and we have received client and partner endorsement of the additional global breadth and product depth that they have delivered to DV.

With a strong and growing cash position and zero debt, we are exceptionally well positioned to take advantage of global market expansion, product acceleration and solution extension opportunities that exist in the market.

Wrapping up with a quick take on our innovation story, DV continues to lead the industry with unique, value-driving solutions that set us apart from our competitors, paving the road for additional growth ahead. In the last 12 months, DV has launched or expanded: the only widely available attention solution. The only comprehensively accredited programmatic suite. The only solution for measuring and filtering fully on-screen CTV impressions. The only certified CTV fraud program for programmatic partners. And, we are the only leading verification company to root out and publicize the numerous new fraud attacks that shake the confidence of digital advertisers around the globe. Soon we will launch the only verified audience solution, along with Comscore.

And, now we are the only independent, leading verification company that is not in the conflicted business of selling digital ads.

We lead and differentiate with innovation, and earn our customer's trust through independence.

With that I'll turn it over to Nicola.

**Nicola Allais, CFO:**

Thank you, Mark, and good afternoon everyone. Let me begin with a review of our fourth quarter and full year 2021 performance before discussing our 2022 outlook.

Growth and profitability accelerated in the fourth quarter. We generated 106 million dollars of revenue representing year-over-year growth of 27 million dollars or 34%. We grew

fourth quarter adjusted EBITDA to 40 million dollars, or 46 % year-over-year, representing a 38% adjusted EBITDA margin. For context, DV generated more revenue and more adjusted EBITDA in the fourth quarter of 2021 than it did in all of 2018.

Fourth quarter results were ahead of our expectations as the impact of supply chain disruption on CPG and Auto ad spend was lower than we had anticipated going into the quarter. Stronger than expected growth from verticals such as Financial Services, Retail, and Entertainment more than offset the slight weakness in CPG and Auto, demonstrating the benefits of our well-diversified customer base. The acquisition of OpenSlate, completed at the end of November, did not have a material impact on fourth quarter results. As previously mentioned, we anticipate the integration of OpenSlate's solutions to generate between 15 and 18 million dollars in 2022.

Revenue growth was broad-based across advertisers, platforms and publishers and each revenue type grew sequentially from the third to the fourth quarter, which is our seasonally strongest quarter.

For full year 2021, we delivered 333 million dollars in revenue, up 36 % year-over-year, and adjusted EBITDA of 110 million dollars, up 50 % year-over-year and representing a 33 % adjusted EBITDA margin.

In 2021, Advertiser Programmatic grew 45 % driven by ABS which grew 77 % and represented 50 % of Advertiser Programmatic revenue.

Advertiser Direct revenue grew 27 % driven by Social revenue growth of 47 %. Social represented 33 % of our Advertiser Direct Revenue, up from 29 % in 2020.

Finally, supply-side revenue grew 38 % in 2021, driven by new deals with large platforms such as Yahoo Japan and Amazon, as well as the 19 new publishers we signed on during the year.

The basis for our strong advertiser revenue performance is an attractive set of KPIs which drive the recurring nature of our business. Our 2021 net revenue retention rate was 126 % while gross revenue retention was 98 %. Our customer tenure was 6.9 years for our Top 75 customers. For our top 100 customers, we grew average revenue per customer from 1.8 million dollars in 2020 to 2.2 million dollars in 2021. Finally, we increased the number of customers generating more than 1 million dollars in revenue by 42 % in 2021.

Shifting to costs, our cost of revenue increased by 19 million dollars year over year in 2021, primarily due to an increase in costs from revenue-sharing arrangements with our Programmatic partners as Programmatic Revenue grew as a %age of total revenue. In addition, we continue, and intend to accelerate, our investments in cloud-based hosting solutions to provide the scale and flexibility necessary to support our geographic expansion.

GAAP product development and sales & marketing expenses, which include stock-based compensation, increased at a rate below our top line growth, reflecting the operating efficiency of our business model. In 2021, we expanded adjusted EBITDA margins to 33

% while continuing to invest in the business. We added over 200 employees during 2021, including approximately 100 from our 2 acquisitions.

In terms of cash flow and balance sheet, we generated 83 million dollars in cash from operating activities in 2021, a nearly four-fold increase from the 21 million dollars generated in 2020. We had approximately 222 million dollars of cash at the end of the year and zero debt on the balance sheet.

Turning to guidance, we expect to continue to deliver high revenue growth and high profitability in 2022. We expect full year 2022 revenue in the range of 429 to 437 million dollars, a year-over-year increase of 30 % at the midpoint, and we expect full year 2022 Adjusted EBITDA in the range of 126 to 134 million dollars, representing a 30 % adjusted EBITDA margin at the midpoint. We expect the quarterly share of full year revenue to be similar to the seasonal patterns that we achieved in 2021.

For first quarter 2022, we expect revenue in the range of 89 to 91 million, which implies 33 % growth at the midpoint. We expect first quarter adjusted EBITDA in the range of 21 to 23 million dollars, which represents a 24 % adjusted EBITDA margin at the midpoint. While we anticipate realizing synergies from the acquisitions of OpenSlate and Meetrics by eliminating duplicative costs over time, we expect operating expenses to trend higher in the first half of 2022, and this is reflected in our first quarter EBITDA guidance.

Stock-based compensation expense for the first quarter of 2022 is expected in the range of 9 to 10 million dollars. For the full year, stock-based compensation expense is expected in the range of 44 to 49 million dollars. Shares outstanding for the first quarter are expected in the range of 170 to 173 million.

As mentioned during Investor Day, starting with first quarter 2022, Advertiser Programmatic will be re-named Activation revenue and will include programmatic revenue in addition to pre-campaign Social revenue including revenue contribution expected from selling OpenSlate solutions. Advertiser Direct will be re-named Measurement revenue and will continue to include DV's post-campaign measurement business on Social, CTV, and the open web.

And with that, we will open up the line for questions. Operator, please go ahead.

### **Operator**

Thank you. At this time, we will be conducting a question-and-answer session. If you would like to ask a question, please press star, one on your telephone keypad. A confirmation tone will indicate your line is in the question queue. You may press star, two if you would like to remove your question from the queue.

For participants using speaker equipment, it may be necessary to pick up your handset before pressing the start keys.

One moment, please, while we poll for questions.



Our first question is from Youssef Squali of Truist Securities. Please proceed with your question.

**Youssef Squali**

Great. Thank you very much. I have just two quick questions.

First, maybe first one's for Nicola. Nicola, as you look at the guide that you just provided for the 30 percent top line growth for 2022, I was wondering if maybe you can just flesh out a little bit the main drivers for that growth between maybe, you know, established products like ABS versus some of the new products like Authentic Attention, Custom Contextual, et cetera.

And then, maybe just for Mark. Any updates on the potential partnership with--that you guys spoke to on the last--I think last quarter. I'm not sure exactly whether it was in the earnings call or subsequent to that. Anyway, any kind of update there will be super helpful. Thank you.

**Nicola Allais**

Yeah, Youssef, I'll take the first part of your question. So, our guidance--we think our growth for 2022 is going to come from the sector that we've been discussing all along, which is new products, new vectors, new platforms that we will integrate with, but the overall under arching growth vector is really volume and our MTM growth.

As we outlined in the investor day deck, MTM is really what has driven our growth in the last two years. MTS remains fairly stable and that's how we anticipate seeing 2022. So, the volume is really what's going to grow--what's going to be the biggest driver of the growth.

And then more specifically around established versus new products, we do believe our new products are going to obviously grow, but it's early days on the ones that you mentioned. So, it's really going to be just an overall growth across the entire established products that we have.

**Mark Zagorski**

Cool. And then Youssef, regarding the Facebook question. I mean, obviously, we don't have any news to share at this point. We continue to lean in on all of the social platforms that we work with, including Twitter and TikTok and several others in which we are continuing to expand our services around and against.

And as we saw with our social growth last year, we've got great core growth across the platforms that we're covering and additional growth across platforms, like Twitter and TikTok and others that are going to be driving expansion in 2022.

So, nothing to report on Facebook right now, but the other drivers of social growth continue to remain really strong and our expansion across new platforms, like Twitter and TikTok are on schedule and continue to grow.

**Youssef Squali**

That's helpful. Thank you both.

**Operator**

Our next question is from Raimo Lenschow of Barclays. Please proceed with your question.

**Raimo Lenschow**

Thank you. Could I stay on that subject a little bit, like Mark, what are you seeing from those walled gardens in terms of willingness to engage given the level of criticism they are facing and the need to be more open, et cetera? Do you see a big sea change or is it just the same normal progression there?

And then the other thing is given that you had two--I mean, obviously, small deals and very good deals, but how do you think about that build versus buy now going forward in terms of what's driving the business?

Many thanks. And bye.

**Nicola Allais**

Sure.

**Mark Zagorski**

Sure. So, on the first question, I mean, I would like to think that we've had these strange black swan events that created brand safety and suitability issues over the last two years and those were one-time deals. It turned--it seemed to be that every week there's another event that pushes brand safety and brand suitability to the front of the minds of advertisers and in particular, across social networks.

I think because of that, there is an increasing interest and level engagement of that we see the social platforms in wanting to bring in third party suitability and safety companies. So, we've talked about TikTok. They've been especially leaning in to work with other partners as they look at expanding the multibillion dollars of revenue they have in advertising and really taking that to the next level.

As we noted, Twitter, we're working with them on a product for their feed.

So, I would say that there was certainly a push two years ago when we had the combined challenges of social unrest and COVID hitting. Those things have now been supplanted by other global crises which have pushed interest in brand suitability and brand safety to a next level and that has just kept the pressure on all the social

platforms to open even further. And we've seen that with their relationships with us in particular.

So, that's the first question.

The second question on the kind of build versus buy as we look at our roadmap moving ahead, we're always going to look for solutions that can accelerate our movement into areas that give us a differentiator and driving outcomes for our client. And if we can buy those faster than we can build them, then that's what we're going to do.

OpenSlate was a great example of that where we had some of the pre-campaign and pre-buy filtering tools on our roadmap. We had some that we partially built, particularly plugging into some of the social platforms and the acquisition of OpenSlate really just accelerated that and filled in that gap faster for us.

We're going to always look for those opportunities. As we've noted, we've got a considerable amount of dry powder to do so. I think the market pricing has adjusted out there for those types of solutions in the private markets as well.

So, I would say that we've said this before, we've got three areas that we look at global expansion, roadmap acceleration, and product adjacency and moving to new and adjacent products. We're going to continue to lean into those areas.

We've got a lot of assets to move--to continue to invest and our philosophy hasn't changed. If we can move faster, if we can get a differentiator by spending money, we're going to do it.

**Raimo Lenschow**

Yeah. Okay. Perfect. Thank you.

**Mark Zagorski**

Sure.

**Operator**

Our next question is from Arjun Bhatia of William Blair. Please proceed with your question.

**Arjun Bhatia**

Perfect. Thank you very much. Mark, I wanted to maybe follow up on that last one on M&A. I'm curious how you're thinking of--it seems like there's a couple of avenues available to you, some that you laid out. But do you view M&A as a way to double down on the areas that you have that are maybe early like CTV and social?

Or is there an opportunity for you to actually expand into new areas that are still very nascent, maybe like gaming and audio? Or are those latter two--maybe that market

hasn't developed. I'm just curious how you think about M&A across those two axes, so to speak.

**Mark Zagorski**

Yes. Thanks, Arjun, for the question. It's a good one.

I mean, our driving philosophy, right, is to ensure that our advertisers can optimize their outcomes. And to do that, we need to verify and measure everywhere. And that everywhere includes geographies, that everywhere includes sectors, and that everywhere includes platforms, right?

So it's, hey, if we have an opportunity to move into a new geography through a partner or through an acquisition, that's something we're going to take a look at. If we can move faster into CTV or audio through an acquisition, we're going to look at that as well. And if there's an opportunity for us to start poking into new platforms or new areas of measurement, i.e., audience or higher levels of performance around attention, we're going to look at that, too.

So, there's no specific criteria saying we're going to buy something in audio tomorrow because we want to get into audio. What we do is we follow our clients' direction of where they want broader verification and broader measurement to accelerate their outcomes. And that means a new sector, it means a new geography or a new type of platform or a new type of business, we're going to head there. So, I think it's really clear.

When we do M&A, it's not about just throwing new dollars onto our revenue into our income statement for businesses that aren't really associated with what we do. They have to be a measurement. They have to keep us independent. They have to keep us unbiased, and they have to drive outcomes for our advertisers.

If they do that, they fit our bill. And if they help--if it has to do with a new sector, a new geography, or a new product suite, we'll go after it.

**Arjun Bhatia**

Got it. Got it. That's very helpful. And then one more.

I think a lot of your prepared remarks and even the analyst day, it seemed like the solution, the platform has expanded so much that now you're adding a lot more value for customers, right? You're going into activation as opposed to just measurement. You're doing that with ABS. You're doing that without Authentic Attention. You're doing that with the CTV investments you're making.

Maybe help us think through how you're approaching pricing power with your customers, right? As you drive more ROI for them, how do you think your pricing evolves longer term? Maybe not what you're going to do tomorrow or the next quarter, but how you view the value you're adding as a way for you to capture some of that value longer term. And what role maybe pricing plays in discussions with your customers today.

### **Mark Zagorski**

Yeah. I think when I think about pricing and pricing power, I'll kind of level it back up one different level, which is we always think about kind of revenue per impression and how can we increase revenue per impression? And that's a combination of, as what we shared at investor day, layering new solutions on top of each other, right, so that we're upselling different types of metrics so that someone starts with core safety and verification, and they move all the way up to the performance scheme. We know we can charge them on the same impression upwards of 10 times what we started with.

So, the first way we look at kind of revenue generation per client and revenue generation per impression is selling new solutions. The second way is for--akin to the question you asked, which is what can we do with pricing. And I think pricing starts to be an element of our overall value prop to our customers. And as we're providing more value, we have more flexibility in increasing pricing.

When you look at a medium like you mentioned CTV, the value that we're adding is becoming increasingly--is increasing, right? Because we are saving them from fraud on a \$40 impression, not a \$1 impression. We are ensuring brand safety on an impression that is a large screen experience in someone's living room, not an app that runs on a mobile phone in some place.

So, we know that the value proposition there is higher. And we believe that over time, as advertisers begin to realize that our ability to have more pricing power will grow. So, we mentioned that one out of every four of our video impressions now in the open internet is a CTV impression. That's reaching a tipping point where we can say, look, not only are we providing a huge level of value for a large number of impressions out there, but we're becoming important enough to advertisers in driving that value proposition that will have some pricing power.

So, I think CTV is still a relatively small piece of our overall puzzle. But when you look at the proportionate impressions that we're driving and supporting in there, how valuable

those are and the value prop that we're driving for those advertisers in CTV, for example, we do believe that we have long-term pricing power in that space as well.

**Arjun Bhatia**

Perfect. Thank you, Mark. Congrats, guys.

**Mark Zagorski**

Sure.

**Operator**

Our next question is from Laura Martin of Needham. Please proceed with your question.

**Laura Martin**

Hi, there. So, I'll ask them one at a time.

So, you announced the Comscore deal at your analyst day 10 days ago. And from your comments today, it sounds like you're going to do more of these types of partnerships. My question is, how does the money work?

If your typical fee is about 8 cents per thousand impressions, is this an upsell or does score get a part of your fee or do they get a fee on top of your fee when you do these partnership deals?

That's my first question.

**Mark Zagorski**

Thanks, Laura, for the questions. It's a great thought. And I think the first thing to always consider is we look at any new partnership as an opportunity for incremental revenue, right? So, it's revenue on top of that stacking of what we can sell a client, which is always good, right?

And in the case of a Comscore or any other partnership that we do, there's obviously a valuable asset--data asset that they're bringing to the table and a valuable data asset that we're bringing to the table.

So, when we look at pricing, A, we think it's a premium solution, number one. And that premium solution is going to have some component of cost that comes from us and some component that comes--of cost that comes from the partner. So, there will be a share that comes out of this.

So, at the end of the day, we're still in the midst of putting together the pricing model for, for example, our Comscore solution. But that solution will be a premium solution that will have a share that goes back to each partner and as a premium solution will likely be above the average--the average return for that solution will be above where our current standardized products are.

We do think that there are opportunities down the road for us to partner with other companies as we move further into performance and as some of the traditional performance metrics become challenged without a core verification element to them.

So, look, we're going to try some things out. We're going to see how they work. But we are--we're really optimistic about our ability to kind of start moving into some of these adjacencies like audience where I think there are gaps today.

**Laura Martin**

Fantastic. That's super helpful. Building on your performance portion of the answer you just gave, the new information you gave us today is that CTV was one in four impressions in 4Q.

My question is performance-based advertising is one of the most powerful advantages of connected television ads. If your core competence is verifying that an ad reached the right person, which is sort of a proxy for effectiveness, but CTV actually allows the advertiser to close the loop between making an ad and an online purchase. It feels like that maybe is better than DV Solutions, which is a proxy.

So, can you talk about how DV grows in that environment with so much CTV now in your impression base?

**Mark Zagorski**

Yeah. So, I think taking a step back, if you look at a couple of the core value propositions in CTV that we deliver, two of which are focused around elimination of fraud and insurance of viewability. And both of those things can impact the measurement of any type of closed-loop attribution that CTV would allow.

So, basically, what I'm saying is before you even kind of are able to determine whether or not a CTV ad can help someone close the loop, you have to determine whether or not you're working with good data, right? So, what you don't want is a bad denominator, right? You're looking at the wrong number of impressions because they're actually fraudulent.

Yes, you're able to show performance. But are you showing the right level of performance because half the TV sets were not turned on or another percentage of the TV sets were actually not real television? They weren't real devices; they are fraudulent devices.

So, I think it's a great insight, which is CTV is this first large-screen sight-sounded motion advertising application that can actually be connected to a transaction. But you always have to remember that data needs to be--need to be confident in that data to begin with. And the core proposition that we've gone out with is eliminate fraud from that transaction.

Even when that transaction is a direct transaction, remember, there can be fraud present because of the way SSAI works as are pulled from other places and delivered, so there's going to be issues there as well as ensure that it's truly viewable. If you can do those two things, then the second part of the equation, which is measuring the effectiveness of that closed-loop transaction, is truly valued.

So, I think we all--that's a long way of saying is I think we always have a place in that--in the evaluation of that transaction and the valuation of that performance because people want to ensure that the data that they're working with when they do that closed loop is actually good data.

**Laura Martin**

Super helpful. Thank you.

**Mark Zagorski**

Of course.

**Operator**

Our next question is from Michael Graham of Canaccord. Please proceed with your question.

**Michael Graham**

Hi. Thank you. Just a quick one on some of the metrics and then another. It looked like MTF was under a little bit of pressure year-over-year and sequentially. Definitely very modest.

But I just wonder if you could kind of let us know if there's anything going on there. Was it just more impression growth towards the end of the quarter? Or are there any sort of underlying dynamics that we should be aware of there?



And then just at a higher level, Mark, you talked a bunch about Authentic Attention, which seems like it has a really great opportunity ahead of it. Can you just talk about what you expect in terms of the pace of getting that developed and integrated? Can that go faster now than something like ABS did given the scale of your platform?

**Nicola Allais**

Yeah. I'll take--Mike, I'll take the first question on MTF. I think the underlying dynamics of what drives MTF haven't changed for us in the past few years. They are drivers of growth that will bring MTF down, including global expansion, which is something that we're doing intentionally. And there will be drivers of growth in MTF, which is the upsell of premium solutions.

What you saw, especially around investor day, you'll see that MTF over the last two years is basically up 2 percent. It was, as you say, was down a little bit in '21. It was up a little bit in 2020. I think it's going to hover around the same levels. What's really driving the growth is volume as we always say, right, MTM.

In particular, what we saw in Q4 is just, frankly, just a continuation of the expansion internationally, and that's just bringing down MTF a little bit. That's the theme for 2021 as a whole, right? It's just having an impact, which is more than offset by volumes. There's nothing that's changed in terms of the underlying dynamics of what you see on MTM and MTF.

**Mark Zagorski**

And on your second question, Michael, so I think we obviously talk a lot about attention because we're very bullish about it. And the reason why is--we state it over and over again. We think that a lot of the common metrics used for driving outcomes have been--are starting to lose efficacy because of the inability to track users, right? So, things like attention are going to become that much important.

And when we think about the road map to becoming essential--so, think the path to essential, right, which is what we want to be. When we talked about our investor day, our continued drive is we are becoming essential to our customers.

If you think about what's essential to them, it's essential that they know that they're spending money, not on fraud. It's essential for them to know that their ads are viewed. These criteria--so fraud and viewability, took time and they went through a process that's really three steps: socialization, standardization, and then scale.

Socialization is introduction of the concept to buyers, right? We need to understand what is attention? What is it all about? What does it mean? That's the stage we're in right now.

And the next stage after that is standardization. So, the industry starts to understand what that metric is, and then they build rules around it. So, groups like the IAB and others come in and say, hey, here are what the standards are around attention.

And then finally is scale and acceptance, right, which is everyone understands what it is. The industry knows what it's--how to create rules around it. The second part is that the buyers start using it as a currency.

We saw this with viewability 8 to 10 years ago, right? Viewability went through the same level of phases. Now, viewability is essential. It's used on almost every impression and almost every digital buy. And whether it's DV or somebody else, viewability is key to an advertiser. We think attention follows that same track as I started.

And your question around how do you make it go faster, well, the way you make the first two stages go faster is, A, you expand socialization. And that's why we're launching attention metrics to our entire base of customers that use the Authentic Ad in an effort to get them used to seeing attention metrics, right, in their UI every day in Pinnacle. So, we can accelerate that.

Standardization, you can't accelerate, but you can certainly be part of the dialogue, and that's what we are every day with our involvement with the industry accreditation groups as well as the industry standard groups like the IAB. So, standardization, we can accelerate by being part of that group, socialization by launching it across our platforms.

And this last part, which is scale, is once you do the first two things, we already have the ability, the sales force and the breadth--global breadth to actually start scaling. So, it certainly is a long-term investment for us to build out an entirely new metric. But we feel that we're in a great spot from our customer perspective, our ability to socialize, a great spot from our industry relationships from our ability to standardize, and a great spot from our ability to scale that business because of what we've been able to do with other solutions like ABS and where we have a built-in group of customers and a built-in launching system in our platform.

**Michael Graham**

Okay. Thanks so much, Mark.

**Mark Zagorski**

You got it.

**Operator**

Our next question is from Vasily Karasyov of Cannonball Research. Please proceed with your question.

**Vasily Karasyov**

Thank you. Good afternoon. I wanted to ask you to talk about the resistance of your business model to potential macro downturn. So, if I look at, let's say, Q2 of 2020, your revenue was still growing at 22 percent in that quarter, whereas all the ad tech companies in my universe had declines of double digits, right?

So, I wanted to ask you to talk about the drivers of that and why that is happening. I understand that you charge per transaction, but at a certain point, the transaction velocity in a crisis should decelerate enough to sort of potentially drive a negative revenue. So, if you could talk in more detail about that. And if you can about both of the revenue streams, how those behave in a macro downturn.

**Nicola Allais**

Yeah. So, I'll take that question first.

So, you're right, listen, you're pointing to the one quarter that was sort of a proof point for a few of the factors that make our revenue model resilient. One is very diversified across most of the industries. We don't have a single industry that's more than 20 percent of the revenue for the company, which means that if some sectors are hit more than others, we are sufficiently diversified.

And that's kind of what we saw in Q4 of '21 when some supply chain issues hit CPG and auto, but we were doing much better than some other industries. So, diversification is the first proof point that we saw in that one quarter.

The second is, it is worth mentioning, as you pointed out, we are flat--fixed fee per transaction. So, the ups and downs on CPMs will not impact us as much as it would for companies that are more on a take rate basis.

And the third one, I think, is just a proof point that we are just a must-have product. I mean, in situations where the market becomes more uncertain, that is the moment where you would want to use our products if you're an advertiser, right? You would want

to make sure you're in the right place that is brand safe, that is viewed, and not subject to fraud.

I think those three components are why we grew 22 percent in that one quarter where we're mostly hit by COVID--where the entire industry was hit by COVID. And we believe that those will carry us--are likely to help us through future periods as well.

**Vasily Karasyov**

Thank you.

**Operator**

Our next question is from Matt Hedberg of RBC Capital Markets. Please proceed with your question.

**Matthew Swanson**

Yeah. Thank you. This is actually Matt Swanson on for Matt.

I just want to double-click on a couple of metrics you gave. That 61 to 39 percent breakout of the Greenfield versus competitive was really interesting. Mark, do you have any context on maybe how that compares to prior years?

And then especially in light of the 80 percent win rate in competitive deals, how do you run your business relative to those two metrics? For example, are you more focused--I know at time IPO, we talked about 75 percent of the market being Greenfield. Or is it those displacement opportunities and getting in front of more deals?

**Mark Zagorski**

Yeah, it's a great question. So, when you look at the proportion of Greenfield customers over the last several quarters, we've seen it actually increase, and that's prescriptive. That's what we want to have happen because the reason why it's increasing is our investments in additional global markets, and our investment in sales resources are playing out, right?

So, when you have more people, they're able to spread out to more places and attack more markets where there isn't anybody there to begin with. So, it is part of our sales strategy to go after new markets, new folks, and continue to win in those places where the opportunity is greatest.

So, we have seen it trend to more Greenfield over time. It doesn't mean we don't back down from a fight. We absolutely will, get engaged when we need to. But obviously, the

opportunity, the pricing opportunities, and the stickiness are greatest when we can get into a Greenfield opportunity.

And it's a testament to our continued investment, in particular, in our global markets where we noted 55 percent of our headcount last year was outside of North America. Again, part of our plan to continue to look for untapped opportunities around the globe, invest in sales and marketing resources in those places, and push that high win ratio that we have wherever we can.

### **Matthew Swanson**

That's great. And then if I could just add in one more. We've always talked about the diversity in the platform. I think people listening to Facebook's earnings call or talking to a Facebook investor, there are growing concerns around some of those other platforms like TikTok or Twitter taking share.

You highlighted your solutions in those spaces as well. But I guess more directly, do you have a preference among the social players about where spend moves? Is there a situation that's better or worse for DV? Or is it kind of core to your platform to be indifferent, I guess?

### **Mark Zagorski**

It's a great question. And I think as a parent, I could say, we love all of our children equally, but some we love a little bit more, right? And I think it's less for the fact that any one platform is more monetizable or higher margins, the fact that some platforms are just easier to work with, right?

At the end of the day, we have to be everywhere. It's important for us to have parity and to be in the key places where advertisers are going.

And if I would say, if any of them become more interesting for us than another, it's really driven by our advertiser demand, right? We talk a lot about TikTok because advertisers are very interested in getting to TikTok today. It's a really untapped space. And they are clearly going after other social platforms business and getting it. And they know that one of the biggest barriers for them to do so is third-party validation.

So, obviously, getting--being everywhere, being on all social platforms is important, and we'll continue to endeavor to do so. But at the end of the day, we follow where our customers want to spend and lean into those places.

### **Matthew Swanson**

Thank you.

**Mark Zagorski**

Sure.

**Operator**

Our next question is from Yun Kim of Loop Capital Markets. Please proceed with your question.

**Yun Kim**

Thank you. Hey, Mark, following up on Matt's last question. How do you balance your sales and go-to-market efforts between new customer acquisition versus expansion with existing customers, especially now that you have new products on the pre-campaign side and also continued attach opportunity around social and CTV?

**Mark Zagorski**

Yeah, it's a great question. And to address that, we actually just went through a pretty significant sales and commercial team reorg as we looked at how we balance our growing opportunities with new customers, but the significant growth that we have by introducing new products to our current customers.

The first stage of that was when we brought in a new commercial leader in Julie Eddleman and combined the client service teams with our sales teams to allow for the people who are talking to our current customers every day to be under the same umbrella as the people that--as new business acquisition.

The second phase of that was actually to verticalize sales teams so that one client group was working both--on each client set so that they could upsell and upsell all of our solutions into our current clients giving the hunters more room to go out and sell totally new clients.

So, basically, advancing into a verticalized structure in which our current clients were upsold by a team that was both servicing and selling them, right, giving that focus and taking our new business folks away from trying to upsell current clients and focusing them on total hunting and filling in white space.

So, it's a great question. I think it's the evolution of our business, and you'll see--obviously, you see there's a lot of companies where as we grow, as we have more solutions, we're able to--we look at creating a different type of commercial and sales

structure to address those challenges. And we literally just got done with that process less than a month ago.

**Yun Kim**

Okay. Great. And Nicola, with the increasing international mix and perhaps newer solutions that may have a lower initial gross margins, how should we think about the growth margin to trend in 2022?

**Nicola Allais**

So, I think the main driver of our margins in 2022 is really going to be the integration of our two acquisitions. That's really what's going to drive what we discussed in our prepared remarks, which is sort of a lowering of our EBITDA margins in the first half of the year before we get back to a more normalized EBITDA margin in the second half. That is the main driver for what you're going to see in terms of EBITDA margins.

In terms of gross margin, which was really your question, that is cost of sales about 16 percent or so of revenue. That is going to move because of two things. One is more revenue moving to programmatic just because there's a rush share to a programmatic partner that goes into that number.

And the second one is our intention to continue to invest in the infrastructure of the business. That's not necessarily an international versus U.S.-driven decision. It's just an overall decision for the overall infrastructure of the business. There will be some investments, but the cost of sales as a percent of revenue will remain fairly consistent below 20 percent.

**Yun Kim**

Okay, great. Thank you so much.

**Operator**

Ladies and gentlemen, we ask that you limit yourselves to one question each in the interest of time. Our next question is from Matt Condon of JMP Securities. Please proceed with your question.

**Matthew Condon**

Hi, guys. Thanks for the question.

Just wanted to ask on ABS, the ABS integration with DV360 being lapped in 4Q. Just how should we think about growth on a go-forward basis there? Thank you.

**Nicola Allais**

Yeah, I'll start there. So, yeah, we're now fully integrated in all of the platforms, about 50 percent of our revenue growth. This is obviously a premium, very attractive product. So, the drivers for the growth going forward are going to be--it is a cornerstone of all of our new sales.

It is also a product that we need to start selling to the clients that are below our top 100. There is an opportunity there now that we know it's a successful product to go deeper into our client base of the product.

And then thirdly, even for clients that have it currently, they're not necessarily using it on their international business. So, we are now, as Mark mentioned in his remarks, you are seeing upsell of ABS on existing clients for their international business. So, those are three vectors that we think will continue to help drive the growth of ABS.

**Operator**

Our next question is from Dan Salmon of BMO Capital Markets. Please proceed with your question.

**Stephen MacLeod**

Hi. This is Stephen coming on for Dan. Yeah, it was good to see that strong NRR number that you gave out. And I know it's still early innings and given some good commentary around your cross/upsell motions and even customer outcomes from these.

But I was just seeing if you can provide any specific color around, let's say, adoption rates, attach rates specifically around maybe OpenSlate pre-campaign solution or attention, or if you can just provide any other metric that can help us quantify demand right now. Thank you.

**Nicola Allais**

I mean, what I would say is the way we think about these products, these product introductions are how well is it sold into our existing base. And we know that OpenSlate product is just not that well sold into our existing base. That is the opportunity that we have there.

So, rather than an attach rate, it's just--it's a new solution we're able to sell it into our customers, and the overlap is very minimal. So, that's kind of how we think about it. And we know that we just don't have that much--we have a lot of opportunities to upsell those products into our existing base. That's what I would say on OpenSlate.



**Mark Zagorski**

Yeah. And on attention, again, we kind of went through the life cycle of a product that we believe can be a real groundbreaker. But right now, that product has managed over 1,400 campaigns in 10 different verticals. We benchmarked 49 billion impressions and about 40 clients are currently using the product.

So, if you think about that 40 out of the thousand brands that we work with, it's still super early days. But we've got a significant amount of runway with regard to attention to continue to expand again. So, look, I think as those get--those solutions get bigger, we'll have more metrics to start putting against them, but we're super optimistic about the initial uptake.

**Stephen MacLeod**

Great. Very helpful. Thanks so much.

**Mark Zagorski**

Sure.

**Operator**

Our next question is from Mark Murphy of JPMorgan. Please proceed with your question.

**Mark Murphy**

Yes. Thank you. I'm just wondering if you can comment on how the signaling is from pandemic-impacted industries such as travel and hospitality, restaurants, retailers as you look at it today because you're fairly deep into the quarter. Are they jittery about inflation and energy prices, supply chains, or the Ukraine conflict? Or do you feel that they're--are they moving ahead in a fairly normal way just in terms of how they're thinking about advertising volumes for this year?

**Nicola Allais**

Yeah. So, Mark, what I would say is unlike what we heard at the beginning of the fourth quarter where we did hear specific concerns around supply chain disruptions, which ultimately, we were able to offset because we're sufficiently diversified, we're not hearing--we're certainly not hearing similar comments right now around supply chain. I mean, the macro events are moving very fast. So, obviously, we are in contact with our customers.

But I would say right now, we're not hearing anything that's specifically telling us that volumes will be materially different than what we thought at the beginning of the year when we set our guidance.

**Mark Zagorski**

Yeah. And one thing we do see through part of our Pinnacle platform called Blueprint where they lay out their campaigns, moving ahead, that's usually a little indicator on what the quarter is going to look like, what the next few quarters are going to look like. And as of right now, we have not seen kind of any strange abnormalities in their Blueprints moving ahead.

**Mark Murphy**

Excellent. That's great to hear. Thank you very much.

**Operator**

We have reached the end of the question-and-answer session. I will now turn the call back over to Mark Zagorski for closing remarks.

**Mark Zagorski**

Thanks, everybody, for your questions. The team here at DV is extremely enthusiastic about what the future holds for us. We continue to deliver high growth and profitability and look forward to keeping you apprised on our five key growth drivers, which fuel our long-term growth trajectory.

Have a great evening, everybody.

**Operator**

This concludes today's conference. You may disconnect your lines at this time. Thank you for your participation. And have a great day.