



FDoubleVerify: Q4 & FY 2022 Earnings Call Transcript

Tejal Engman, Investor Relations:

Good afternoon and welcome to DoubleVerify's fourth quarter and full year 2022 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. 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. We are pleased to share with you today an update on the strong financial results, major product expansions and continued market share gains that we delivered in 2022, a year that cemented DV's credentials as a market leading, highly resilient technology business that consistently outperforms the broader digital advertising industry.

We continue to see a large, growing business opportunity for our verification solutions across new markets, new platforms, and new customers. We are leaning in where our competition is leaning out - providing an opportunity to continue to take market share in a multibillion dollar sector that remains widely untapped.

Our ongoing, EBITDA accretive investments in global sales resources to expand our international presence, in machine learning and AI technology to fortify our successes in social platforms like Tik Tok, and in groundbreaking, uniquely accredited solutions like Authentic Attention, exemplify our laser focus on building profitable market gains via a growing number of long term, sticky relationships that will be hard for less innovative, less invested competitors to dislodge. Our unwavering vision to be the ubiquitous, driving force creating a stronger, safer, more secure digital ad ecosystem continues to not only be DV's "northstar" but has proven to yield exceptional ROI for our customers and partners.

Now, let's jump into our results. We measured five and a half trillion ad impressions in 2022, resulting in record revenue of 452 million dollars, an increase of 36% year-over-year. Our business generated a 31% adjusted EBITDA margin and approximately 95 million dollars of net cash from operating activities last year, even as we continued to thoughtfully invest in expanding our solutions, growing our workforce and integrating new businesses.

We ended 2022 with a fourth quarter revenue growth rate of 27%, which is multiples above the digital advertising industry's single-digit growth rate. Robust topline growth in the fourth quarter, which is our largest revenue quarter, resulted in adjusted EBITDA margins of 37%, a testament to the strong operating leverage inherent to our business.

We continued to gain market share by winning new enterprise clients and expanding usage by existing clients who activated more solutions, platforms and geographies with DV in the fourth quarter. We won a greater number of new and expansionary deals in Q4 22 than we did in the same period in 2021, maintaining an 80% plus win rate across all opportunities, with 67% of our wins being greenfield. Fourth quarter wins included General Mills, Dropbox, Adobe Japan, Amazon Prime Video, GlaxoSmithKline, Swarovski and Abbott . Additionally, we have a robust pipeline of new deals and our first quarter win momentum remains strong, with high profile advertisers including Air France, AirBnB, Fujifilm Japan and Mattress Firm choosing DV solutions.

In the fourth quarter and early this year, we achieved product and platform expansion milestones that we expect will fuel our growth in 2023 and beyond.

Let me discuss these in the context of the three key differentiators that drive our business: our rapidly-growing scale, market-defining innovation, and a deep commitment to being a trusted, unbiased and independent partner across the digital advertising ecosystem.

Beginning with scale and innovation, we meaningfully expanded our product coverage and customer value proposition across CTV, social media and retail media networks, three underpenetrated media environments where we expect to unlock large, long-term growth opportunities for DV.

First, we continue to grow our CTV coverage, especially across the top ad-supported CTV providers. A vast majority of CTV ad impressions are delivered across the top CTV platforms including Hulu, YouTube, Amazon, ROKU, Warner Bros. Discovery, NBCUniversal, Paramount, and Samsung, with, Disney+ and Netflix recently entering the picture.

Following years of hard work to drive ubiquitous coverage of the Authentic Ad, DoubleVerify is now the only verification company that covers all of the top ad-supported CTV providers. Not only does DV cover the platforms that receive nearly all CTV ad spend, but we've also launched industry-leading solutions that span all CTV inventory, from pre-bid avoidance to post-bid blocking and monitoring. Plus, we are the only verification provider with end-to-end accreditation across pre and post bid solutions. Our advertiser partners demand a single consistent metric across everywhere they buy advertising, especially on CTV, and with DV's Authentic Ad, they have it.

In addition to scale, DV is driving innovation in CTV's premium priced environment where every ad dollar needs to perform. CTV Viewability is quickly becoming a key concern for advertisers. Even in some of the top CTV apps, DV's proprietary technology has found that one in four environments play content and record ad impressions after the TV is turned off. And, in some environments, one in two ad impressions drop before reaching two seconds of play. Earlier this year, DV launched the industry's first scalable CTV viewability measurement solution to address these issues. Through our automated, MRC-accredited, Fully-On-Screen certification process, we ensure that ads are only recorded when the TV screen is turned on. Our CTV viewability solution then measures whether or not an ad is 100% in view for at least two seconds or more, thereby meeting both the IAB's and the MRC's viewability standards. Advertisers are thus able to uniformly compare viewability rates, unlocking measurement parity across screens and devices,

and ensuring that their spend is efficiently and effectively delivered - while someone is actually watching. No other company is delivering this level of confidence to advertisers in CTV.

Turning to social, we expanded our measurement solution to include brand safety and suitability on TikTok in November and since then we have seen solid initial uptake by advertisers. Driven by the addition of the new brand safety metrics, we experienced a 19% sequential increase in the number of advertisers activating DV on TikTok from Q3 to Q4. After Meta and YouTube, TikTok generated the most social measurement revenue for DV in the fourth quarter despite its relatively low penetration of our existing customer base. In January, we tripled the number of advertisers leveraging the Authentic Ad on Tik Tok on a year over year basis, from 21 to 68, with plenty of room to grow. As TikTok announced last week, DV is now one of only three badged measurement partners in the TikTok Marketing Partner Program. With our existing customers beginning to activate our enhanced TikTok solution, we see tremendous opportunity to grow our social measurement business.

We also launched brand safety and suitability measurement on Twitter's timeline this January and expect to launch suitability measurement on Meta's feed later this year. As a result of increased customer interest in our expanding brand safety coverage, social measurement revenue growth accelerated from 24% year-over-year in the first half of 2022, to 32% in the second half. We ended 2022 with social representing 37% of our full year measurement revenue, up from 33% in 2021. And the growth opportunity remains substantial given that social is expected to comprise almost 60% of digital ad spend ex Search in 2023, according Magna Global.

The Meta platform represented nearly half of our social measurement revenue in 2022. Almost 80% of that revenue was driven by DV's top 100 customers, where only 54 of the 100 activated DV on Meta in 2022. As we continue to grow our customer value proposition through brand safety, suitability measurement, and coverage of Meta's feed, we expect many more of our top 100 customers to activate, substantially growing our revenue generation from the platform.

Retail media networks, one of the largest and fastest-growing ad environments in the US, is emerging as a unique new business opportunity for DoubleVerify. It took only five years for Retail Media advertising to ramp from 1 billion dollars to 30 billion dollars of ad spend. Retail media will be the fourth largest ad spending environment in 2023 at 45 billion dollars and will exceed ad spend on Linear TV by 2025, according to eMarketer. DV grew trackable revenue from retail media by 115% year over year thanks to our compelling value proposition for advertisers, who want to ensure their spend can be verified consistently across all media environments - including those managed by the world's largest retailers. Without consistent media quality standards, like those measured by DV's Authentic Ad, Return-on-Ad-Spend analyses are flawed.

DV works with some of the largest retail media networks including Amazon, Walmart, Target, Macy's, Best Buy, and Kroger and we are working to expand our coverage with international retailers as well. We provide activation and measurement solutions for advertisers as well as platform verification products, thereby creating value across the entire media transaction, both for the buy and the sell side. We expect retail media growth to continue at triple digit rates in 2023 with contributions across all three of our business lines. Importantly, retail media networks offer DV verification solutions to brands of all sizes on their platforms, essentially acting as an "SMB channel partner" allowing us to tap into entirely new ad budgets and providing the opportunity to meaningfully grow our TAM.

Enhancing our value proposition across CTV, social media and retail media networks provides customer upsell opportunities that we expect will continue to increase our average revenue per customer in 2023 and beyond.

Upselling compelling products across new platforms creates a flywheel for long-term growth as we've seen with Authentic Brand Suitability or ABS, which was launched at the end of 2018. Now in its fourth year, ABS revenue continues to grow at a rapid 46% pace and contributed approximately 123 million dollars to our topline in 2022.

Nearly 60% of ABS's 2022 revenue growth was driven by new logo wins and upsells to existing customers while approximately 40% was driven by existing ABS customers using the product more, including in a larger number of international markets. It's been exciting to see so many of our Top 100 customers, including Amazon-AWS, Merck, Diageo, Vodafone and Mondelez expand their use of ABS internationally. We expect ABS to continue to grow given 35% of our Top 500 customers have yet to activate this industry-leading solution.

Today, we're announcing the launch of Authentic Direct, which empowers publishers to offer ABS controls to their direct advertisers sharply reducing brand safety violations and block rates on campaigns not purchased via a programmatic platform. Authentic Direct provides a direct link to an advertiser's suitability profile, allowing publishers to easily automate targeting that reflects an advertiser's granular preferences. It further solidifies DV's drive to ensure our metrics are viewed as "advertiser currency" wherever their spend may be.

As our product coverage grows, we have more solutions to offer across a greater number of media environments and geographies than ever before. From activating our core verification solutions everywhere to adopting our newer performance solutions, including DV Authentic Attention, DV Custom Contextual and Scope3 sustainability measurement, our flywheel has never had greater momentum.

We see this momentum reflected in our key customer KPIs. We achieved a Net Revenue Retention rate of 127% in 2022 maintaining an over 120% NRR for the last 4 years. The average revenue for our top 100 customers grew 16% year over year to 2.6 million dollars. We had 78 clients generate more than one million dollars of revenue in 2022, that's 22% more than in 2021.

In addition, we grew the total number of advertisers generating over 200 thousand dollars of revenue in 2022 to 246, a 29% increase over 2021. And our advertiser relationships remain incredibly sticky. Our Top 75 customers have stayed with DV for over 7 years while our Top 50 and Top 25 have been loyal DV customers for over 8 years.

Transitioning to our final, and perhaps most important differentiator —trust. Trust is core to the value we deliver to our customers and underpins our important role in the digital advertising ecosystem. This year, DV announced the discovery of BeatSting, the first large-scale, audio-ads fraud scheme, which cost advertisers up to 1 million dollars per month. In addition, we recently collaborated with ROKU to eradicate a highly sophisticated ad fraud scheme called SmokeScreen that falsified CTV traffic. Working with platforms to mitigate fraud is a part of DV's mission to make the digital advertising ecosystem stronger, safer and more secure

Moreover, we began 2023 with the announcement that the MRC has accredited DV Authentic Attention, which is now the industry's first accredited Attention product. Through our industry leading number of accreditations and fiercely independent market position we remain the sector's most trusted verification provider.

To conclude, despite headlines focused on macro headwinds and recession fears, the digital advertising industry continues to grow. Global digital ad spend is expected to expand by 8% in 2023, according to Magna Global, and DV expects to grow significantly faster. In fact, every digital channel, from digital display to premium CTV, is projected to deliver ad spend growth in 2023, according to the IAB's survey of nearly 220 ad investment decision makers.

According to the survey, advertisers stated two of their top 3 goals are "improving media efficiency" and "improving brand equity". In addition, "cross-platform measurement" is the area that most participants said would command an increasing focus.

DoubleVerify solutions directly address these spending priorities by reducing media waste, improving brand equity and enabling cross platform measurement at scale, providing parity across multi-screen campaigns. DV helps make every ad dollar count.

We are excited about the sizable greenfield opportunity to expand our solution to the hundreds of top brands that we do not work with today, increasing the influence and scope of our verification currency around the globe. And, we are equally excited to continue to build on our current relationships and expand our solutions with the 1,000 plus advertisers that are existing DV customers.

We remain focused on maintaining our strong pipeline momentum of new and expansionary deals, thus driving significantly greater market share and an even stronger long-term growth trajectory.

The opportunity for DV has never been greater, and our global team, armed with the most accredited, trusted product suite, is primed to take advantage of it.

With that, let me hand the call over to Nicola.

Nicola Allais, CFO:

Thank you, Mark, and good afternoon everyone. DV had a strong fourth quarter and full year 2022, demonstrating the resilience of our business and the strength of our operational execution through a challenging macro environment. Let me begin with a review of our fourth quarter and full year 2022 performance before discussing our 2023 outlook.

Fourth quarter total revenue growth of 27% was driven by 40% growth in activation, 10% growth in measurement, and 29% growth in supply-side. Our activation and measurement businesses which are driven by advertisers, were a combined 91% of our total fourth quarter revenue. Advertiser revenue grew 26% in the fourth quarter driven by 22% growth in volume (or MTM), and 3% growth in pricing (or MTF) on a year-over-year basis. In addition, OpenSlate performed inline with our expectations and is now fully integrated into our business making DV the only provider to offer end-to-end social verification, from pre-campaign activation to post campaign measurement.

MTM growth accelerated sequentially from 17% in the third quarter to 22% in the fourth quarter. We drove volume growth through product, channel and geographic expansion with existing customers as well as through new customer wins. DV's continued volume growth in the face of macro headwinds underpins both the durability and the resilience of our revenue model.

With regards to pricing, MTF growth of 3% in the quarter was attributable to continued mix shift towards premium priced solutions - ABS's strong impression volume growth of 49% in Q4 was partly driven by international where, as Mark mentioned, large global brand customers are continuing to expand their use of ABS.

Fourth quarter measurement revenue grew 10% driven by existing client growth and new client activations, and was led by Social, where volumes grew 33%. International measurement revenue grew 5% in the quarter on a reported basis, a slight pick up from 2% in the third quarter. DV's measurement business is predominantly US-based today with a relatively small exposure to international, which comprised 26% of total 2022 measurement revenue. We continue to see several growth catalysts for DV's measurement business. Our product and coverage expansion on Social, CTV and Retail Media Networks, as well as our new customer wins are expected to contribute to measurement growth in 2023 and beyond.

Finally, Supply-side revenue grew 29% largely driven by new revenue from platforms that embed DV's solutions to provide their customers with inventory that meets a standard level of third-party verification. Publisher revenue also grew, mainly driven by growth in new publisher customers.

For full-year 2022, revenue growth of 36% was driven by activation where both premium and core programmatic products delivered strong growth of 50%. Revenue growth of 17% in measurement was primarily driven by social, which comprised 37% of our 2022 measurement revenue. With spend on social platforms expected to comprise approximately 60% of digital ad budgets ex-Search in 2023, our social measurement revenue continues to have a long runway for growth. Supply-side revenue growth of 47% was driven by increased platform and publisher revenue and by the addition of OpenSlate's platform solutions.

For full year 2022, advertiser revenue growth was primarily driven by volume growth. We measured 5.5 trillion transactions, a 22% year over year increase in MTM, while average fee per thousand impressions increased to 7.2 cents, a 7% increase in MTF. In 2023, we expect volumes to remain the primary driver of our growth as we continue to verify more digital ad impressions through product innovation, channel and geographic expansion with existing and new customers.

Moving to expenses, cost of revenue in the fourth quarter increased by 24% primarily driven by our revenue sharing arrangements with programmatic partners, as activation revenue grew to 56% of total revenue from 51% a year ago. Revenue less cost of sales remained at steady levels in 2022 at 83% of revenue, and at slightly lower levels than prior year, reflecting the larger share of activation revenue, in addition to continued investments in scaling the infrastructure needed to support our growth.

Non-GAAP product development costs grew 50%, sales, marketing and customer support grew 26% and G&A grew 22% in the quarter compared to prior year. Finally, we delivered 49 million dollars of adjusted EBITDA or 37% margin and \$18 million of net income in the fourth quarter. For full year 2022, total non-GAAP operating expenses represented 51% of total revenue, consistent with 2021, while full year adjusted EBITDA of 142 million dollars represented a 31% adjusted EBITDA margin as our business continues to combine high revenue growth with high margins. We end 2022 with 902 employees, up from 810 at the end of 2021, an 11% year-over-year increase as compared to a 36% revenue increase in that same period, reflecting the efficiency of our operations as we scale.

In terms of balance sheet, we generated approximately 95 million dollars of net cash from operating activities in 2022, resulting in an operating cash flow to adjusted EBITDA ratio of 67%.

Capital expenditures of approximately 40 million dollars in 2022, included approximately 32 million dollars invested in expanding our global headquarters as we returned to office this year with a significantly larger employee base than before the pandemic. Finally, we ended the year with 268 million dollars of cash on hand and zero long-term debt.

Moving to guidance, let me first highlight the market trends we are seeing. Overall, the demand environment for our solutions remains healthy and we continue to close on deals in our pipeline, which remains robust. Heading into 2023, we believe we have realistically accounted for the evolving macro headwinds and expect to continue to deliver industry-leading revenue growth and strong profitability.

For the full year 2023, we expect revenue in the range of 550 to 564 million dollars, a year-over-year increase of 23% at the midpoint, and adjusted EBITDA in the range of 164 to 172 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 experienced in 2022.

For the first quarter 2023, we expect revenue in the range of 117 to 119 million dollars, a year-over-year increase of 22% at the midpoint, and adjusted EBITDA in the range of 28 to 30 million dollars, representing a 25% adjusted EBITDA margin at the midpoint.

For modeling purposes, we expect stock-based compensation expenses for the first quarter of 2023 in the range of 11 to 12 million dollars. For the full year, stock-based compensation expense is expected in the range of 54 to 59 million dollars. Weighted average fully diluted shares outstanding for the first quarter are expected in the range of 171 to 173 million.

With zero debt, a strong cash balance we are well-positioned to drive further business expansion and accelerate our long term growth in 2023.

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

Question and Answer Section

Raimo Lenschow from Barclays

Hey this is Frank, on for Raimo. I wanted to ask on how the ROI pitches resonated with new customers in this macro. And with that specifically, are there any trends to call out on the new greenfield deals?

Mark S. Zagorski, CEO

We have always leaned very heavily into the fact that media quality, which is what we measure and verify, is the basis for all performance. The quality of what you're buying, ensuring that it's viewable, ensuring that there's no fraud in the lines of who your brand is, is the main reason why customers work with us. In good times, it resonates. And in times in which ad budgets may be a little tight, it resonates even more. It's been super helpful, particularly as we move into greenfield areas where clients are not needing anything. If they believe that we can help optimize their spend, which we do, it makes that sale that much more powerful.

We closed more new deals in Q4 this year than we did last year. Our greenfield win rate was almost 70% again. It is helping to attract new clients, and that story is resonating even more in

this kind of challenging environment. So, it hasn't changed our pitch a lot, but I think it definitely helped us with those customers, pushing them a little over the edge who may have been standing on the sidelines, questioning whether or not they needed verification, by proving that we're actually helping them make their ad dollars that much more efficient. It's truly made us a bigger part of their thought equation as they look to spend. So, it's been helpful on retail for sure.

Raimo Lenschow from Barclays

Great. Thanks, Mark. And one follow-up, if I can. I was wondering if you could touch on the macro assumptions baked into the guide and how much, if any, is baked in from newer platforms like TikTok, Netflix, Meta, etcetera.

Nicola Allais, CFO

I'll start with the back of your question, which is we haven't baked in a lot of upside for the integration that you just mentioned. We have the tool in place and we're working with the platforms, but the numbers are really based much more on a realistic view of core products for core market and core solutions. The guidance takes a more realistic approach around continuing to sell the current products to our current clients, with obviously some new sales on top of it, but limited revenue impact from the new platforms yet.

Arjun Bhatia Analyst, William Blair & Co. LLC

Hey, guys. Thank you. Congrats on the quarter and the strong execution across the year. Going back to the greenfield question, it seems like – there's obviously a lot more opportunities that's still out there. What were these customers doing before they decided to adopt DV, rather? And was that something that was outsourced to agencies, something they were doing manually or something that was not addressed at all? And, now, what is the factor in your view that's driving these brands to decide, hey, we need to adopt DV now and we need verification, fraud mitigation etcetera.

Mark S. Zagorski, CEO

Yeah. It's a great question, Arjun. A couple of things to consider. The first is, in many cases, the customer has pretty limited awareness of the verification solutions that may be available and how they actually can help accelerate what they're doing on the media spend side. The first aspect of this is creating awareness and showing them that there's an opportunity for them to better optimize their spend. In those cases, they're not using anything, right? They're, in some cases, not focused on the impact that fraud may have on their spend. In other cases, they may see viewability as a give me, something that they would assume in certain environments, and we can give them the heads up that in environments like CTV, viewability is not a give me.

In most of those cases, it's a combination of lack of awareness of what the impact of verification solutions can be, but also the fact that they're just not using anything to begin with. A lot of that is spend that's outside of the US as well. As we go into new markets we're still gaining traction and that's the first bucket.

The second bucket, someone maybe using some native tools, homemade stuff, tools that are embedded in platforms themselves. And this is where our positioning around being independent,

being unbiased is really the sale. If you're using a tool for fraud that's baked into a transactional platform, there's not really a ton of incentive for that platform to flag as much fraud as possible if they're getting paid for it, right? I think that is the other case, too. The either is using nothing, so we have to create awareness, or they are using an embedded tool, and at some point, they actually start feeling that – the lack of independence on that tool is going to hurt them.

Arjun Bhatia Analyst, William Blair & Co. LLC

Awesome. Thanks, Mark. That's super helpful. I want to touch on Authentic Direct. It seems like a really interesting product, probably a lot of applicability in your customer base. How should we think about the revenue cadence for this? I remember when ABS was launched and that kind of drove a hockey stick in growth in programmatic. What are you thinking of adoption trends and how you take this to market within your customer base?

Mark S. Zagorski, CEO

Yes. It's a great question. We're really excited about Authentic Direct because it extends the power of ABS into direct buys and it makes DV that much more powerful as a currency. It's really about ensuring that DV data can be used wherever and however an advertiser buys. Now, the spin on Authentic Direct is that it's a publisher tool. It's a tool that enables publishers to provide the same level of granular verification that advertisers use in pre-bid in the programmatic space to use that on their direct buys.

Because it's a publisher tool, it's definitely less of a massive revenue driver than an advertiser tool would be. However, it adds to the total value proposition of what you need to provide for an advertiser. Now that they know that ABS currency can be used in programmatic, it can now be used in direct buys as well. We're being pretty tempered on the growth trajectory of that product and what impact it may have. We look at it more as a strategic investment in broadening the acceptance of our data, wherever a buyer may buy.

Andrew Boone Analyst, JMP Securities LLC

Hi, guys. And thanks so much for taking my questions. As Facebook is set to open more broadly out towards the end of this year, can you talk about the learnings that you've had from Twitter, as well as TikTok? And what does that suggest about the opportunity for Facebook as that becomes more of a reality?

Mark S. Zagorski, CEO

Andrew, it's a great question, and you nailed it. The work that we've been doing with TikTok and Twitter has really given us a great basis from which to think about how we approach newsfeed environments, and particularly those newsfeed environments with a ton of very rich content. And a few things that we learned were, first, that there is a flywheel of knowledge, so there's a relatively heavy machine learning investment upfront. But once that thing get flying, it makes it easier and easier over time to manage the feeds and provide verification across those.

From a technical perspective, we're learning a ton that I think it was probably better that we learned to walk on some of the smaller social networks so that we can run when we hit Meta. That's the first thing.

The second thing we're seeing is that brand safety and suitability is, by far, the biggest demand for advertisers when it comes to social media networks and those newsfeeds. So, we've provided viewability and IVT measurement for a while across those platforms. But when we launch with TikTok for example, the brand safety and suitability solutions, we saw a significant growth in advertisers who want to turn us on across social and across TikTok. We know that it's a big trigger for growth and we know that it's super valuable. I think, from a technical perspective, billings, these two environments has helped us kind of just become smarter on how we're going to apply our toolset and our machine learning toolsets.

And from a business perspective, what we're finding is that it really is unlocking an entirely new source of advertiser interest when you start putting brand safety on top of the newsfeed environment. So, we really remain bullish on what we're going to be able to do there. As we've noted, TikTok went from zero to our third largest social network measurement basis in a year, and that was largely based on some of the momentum that we got when we started announcing things like brand safety and suitability measurement cost there. So, we're looking forward to Meta. Again, no clear defined date that we'll be able to provide at this point, but we are excited and it should be substantial for our business.

Andrew Boone Analyst, JMP Securities LLC

Thanks. That's helpful. And then, I wanted to touch on international. You guys had 5% growth in 4Q, kind of low single digits in 3Q. Understood the macro there and everything else that's going on. But how do you guys accelerate that and how do we think about just the potential for international to become a bigger part of the business? Thank you so much.

Mark S. Zagorski, CEO

I'll talk a little bit about the kind of strategic part of international. And if, Nicola, you want to add any numbers to back me up on this, that would be great. We talked about over the last 12, 18 months how we felt we were under-invested in our international sales force, and we've juiced that up over the last several quarters. I think we truly believe that there's a significant outgrowth outside of North America that we've yet to tap into.

Despite the headwinds there's still a relatively non-penetrated business. When we look at our measurement business, for example, less than 30% is coming from outside of the US. And that means when 60% of digital ad spend is outside the US, we're definitely under-weighted when it comes to those markets. That investment we've made over the last few years was to make up for that. Despite those headwinds, when we look at the wins that we had in Q4, a good number of them were outside the US, big ones like Swarovski, Adobe Japan, Airbnb, General Mills, on a global basis. These are big – McDonald's Japan. These are big international growth numbers that we're able to close via this further investment in our global team.

We look at that as still an untapped opportunity. APAC is definitely performing better than EMEA was, which is no surprise based on kind of the different global headwinds that we've seen in the two regions. But we see both of them actually turning corners to stronger growth rate coming into 2023.

Matthew Swanson Analyst, RBC Capital Markets LLC

I want to dig in a little on the macro. Mark, I think you've mentioned a couple of times that this has been a challenging macro, which I don't think is the first thing someone would think when they see your results. If there's areas that you would point out specifically, saying that we're more impacted from a macro headwind standpoint, I think that'd be interesting. And then, the second part, you've mentioned a few times about a lot of your appeal coming from optimizing spend, and that almost feels like something that'd be a tailwind to challenging market is people focusing in that area. If you could talk about the puts and takes in the current environment.

Mark S. Zagorski, CEO

On the macro side, we have always been pretty clear that we are not immune to macro headwinds, but we're pretty resilient. I think that's what our performance showed. We are not a percentage or take rate business that gets impacted by CPMs because we're a fixed transaction fee. We run on volume, and those volumes continue to be good. But there's always some challenges. I think the challenges that we saw are really more international-based than they were domestic-based. And since our international exposure is relatively light. I think we were impacted significantly less than other ad-based businesses over the last several quarters, even though there was a bit of a drag there. We are clear in our Q4 and Q3 call that there is some drag, particularly in EMEA.

That being said, we are confident that based on the new products that we're launching, coverage that we're able to provide across new sectors, and our further investment in some of those international markets where we see things actually doing pretty well. That macro we won't be immune to, but it's not going to hit us the way other companies have gotten hit. I think both our results in Q4 and our guides for the rest of the year exemplify that.

On the optimization front, you're exactly right. There is a question earlier regarding how does it change your pitch or does it help you in greenfield opportunities? It definitely has. And from the fact that if we can prove to an advertiser that it's important for you to worry about fraud. If 5% of your spend is going to fraud and you're a CMO and your marketing budget was just cut by 20%, that extra 5% is critically important.

The idea of ensuring that there's media quality, that the ads are being seen, that they're actually being delivered to a real human, those things become much more important to advertisers when their budgets get squeezed. We've always said we're important in good times because it just makes sense and we're even more important in challenging times because when every dollar counts, there's no room for waste, and we help ensure that advertisers don't waste.

Matthew Swanson Analyst, RBC Capital Markets LLC

On the MRC accreditation around Attention, could you give us some more color on how big that is for customers? And then we're looking to see – I don't think you want to predict the next ABS given how successful that's been, but the next big upsell product, does Authentic Attention feel like the one that maybe next in line?

Mark S. Zagorski, CEO

We are incredibly bullish on Attention as a category. It's getting a significant amount of focus from advertisers, particularly as they look at things like reach and frequency being limited in their effectiveness as a proxy for an outcome. And as the digital ad ecosystem becomes increasingly fractioned across multiple different types of platforms, the ability to measure across those platforms becomes tougher and tougher. Having a proxy-like attention is really attractive to advertisers because of the platform nature of companies like us that can do that, but also because of the fact that they're getting increasingly wary of, again, reach and frequency being the only proxy that works for an outcome.

When it comes to accreditation, it is important. And the reason why it's so important is because you're looking at a category that no one has really defined yet. And we've always said, in the build-up to attention and the successive attention, there's three phases. There's socialization, which is getting people to understand what it is and getting our customers on YouTube to engage with Attention. There's standardization. And then, there's commercialization. It's getting out and scaling with it.

We're still focused on the first two layers of that, which is getting people to understand and engage with it. We've launched the Authentic Attention Snapshot and we have had literally thousands of engagements with that through our Pinnacle UI toolset with the Snapshot version. So, it's got the socialization started with our customers.

The standardization is key. That gets standardized through accreditation, through folks like the MRC, but also through creating industry standards to groups like the IAB. Once those get set and a great example that we use all the time is viewability was a – the category that started off as kind of Wild West, they've been trying to decide what they thought viewability was, but then was corralled by standards and accreditations, and viewability became a multi hundreds of millions of dollar category. We believe that attention can be that a similar-sized category and viewability if not greater. And we also believe that we are in the full position to own that space.

So, again, early days, early time in the process, but we are enthusiastic about it. And as one of our favorite children right now, we are going to shower that product with love and attention and make sure that it's successful.

Eric J. Sheridan Analyst, Goldman Sachs & Co. LLC

Maybe a two-parter, if I can. Always wanted to get the perspective at the beginning of the fiscal year of what you see as sort of the two to three most important high priority investment dynamics in the business, not only with an eye towards 2023, but setting the business up for compounded growth beyond 2023. And with that answer on investments as a backdrop, how should we be thinking about variability in the margin that you've laid out for 2023 and/or a dynamic around the exit velocity of the margin in the business for 2023 going into outyears? Thanks so much.

Mark S. Zagorski, CEO

When we think about our high priority investments, I want to start with the kind of basis of everything we do. And that's involved in investments in our machine learning and AI technology. These are investments that underpin a good number of our products. We've found that as we invest more on those, it will allow us to run those products more efficiently, more effectively, and in the long term more profitably as well. So, A, that would be one key investment for us. And the second is more product specific. We've got two areas that we talked about on the call that I think are continue to be growth drivers for us, which are Social and CTV. Our investments in those products over the next 12 to 18 months will provide not only short-term returns but as those sectors grow, particularly CTV, we're in a really great position to take advantage of that growth over time. I think core investment, machine learning and AI that drives kind of a lot of our verification tools and then specific investments across the Social and CTV are going to pay off because those are just underpenetrated segments for us that are continuing and growing across the macro.

Nicola Allais, CFO

Just to follow-up on that, we are going to make sure to balance the market opportunity with what we're seeing in the market in terms of variability. We're going to be thoughtful about how we actually invest, the speed of the investment, the opportunities obviously there for us to take. We're guiding to a margin that remains steady at a healthy 30%, but we'll take a look at the market to see how we need to manage that to continue to invest but also to remain at those levels in terms of guidance for the margins.

Michael Graham Analyst, Canaccord Genuity LLC

I wanted to drill into CTV for a minute and ask you to spend a second on what kind of trends you're seeing with the big ad-supported streaming platforms. How pricing is normalizing on some of those, particularly Netflix. Maybe just a few comments there would be helpful. Thanks.

Mark S. Zagorski, CEO

We don't have a ton of visibility on the actual ad pricing that's going across those platforms. But when we look at our solution, we've bundled in the CTV coverage into our standardized measurement pricing across video. We've not trifurcated our price between video and CTV as of yet.

We're still looking to gain traction across those platforms. At the end of the day, for us, it's limiting the amount of friction when it comes to CTV measurement so that we can get people up and running across those ad-supported platforms and get the measuring there. Pricing wise, we haven't moved the needle on that yet, but volume wise, we've seen a nice uptick in CTV volume based on our additional coverage on those expanded platforms.

Michael Graham Analyst, Canaccord Genuity LLC

And then just a quick follow-up. I wanted to ask on the international MTF trends. Are we seeing expansion there? I know there's a bit of a tougher macro, but are we seeing those MTFs expand to get closer to the North American levels, or is that still something that's not in the card?

Nicola Allais, CFO

Michael, no. I would say, we're not seeing the gap closing yet. And we're not necessarily surprised by it. Our model is really volume-driven and we're looking to make sure to be able to verify everywhere we can. It's a function of where the CPMs are in different parts of the world. And obviously, there are some markets that are more mature than others. In general, the rest of the world rates do remain lower than the US rates.

Vasily Karasyov Analyst, Cannonball Research LLC

My question is about your guidance for fiscal 2023. If you look at your guidance for revenue and then adjusted EBITDA, which one are you more confident in, if you had to choose? My guess would be probably EBITDA. Do you have some wiggle room in the cost base in case something catastrophic happens? And the resilience in your business model is bridged by some things that's going on with the ad market and you would be able to save that. Would that be the correct assumption or am I looking at it the wrong way? Can you please talk about it and help us understand more where the safer area is there?

Nicola Allais, CFO

We are being thoughtful and prudent in terms of managing our expenses because of the variability that we're seeing in the market still. We are able to dial up or down the investments that we need to make to grab the market opportunity fairly quickly. I think your perspective is the right one. We do have the levers there. We're not going to be super rigid if we see an enormous opportunity and we need to go after it with additional investments, we will do that. But we are going to be mindful of the bottom line and the profitability.

Cameron Toler Analyst, JPMorgan Securities LLC

Two questions at a high level. Obviously, you guys are tied to volumes. But the major brands you've been interacting with, how are they thinking about 2023 and what volumes assumptions are they embedding in their plans?

Mark S. Zagorski, CEO

We've always noted that we report on MTM and MTF, but really, MTM is the lifeblood of our business. We wanted to add volume and we do that in three main ways. We do it by growing our current customer business with our current products. We grow it by expanding the products we sell to them, so they're buying more products that hit more impressions. And we do it by covering more sectors like covering more types of media. We've seen that media expansion happen in CTV. We've seen that media expansion happen with Social.

When we look at our MTM growth this year and what we're hearing from them is, on core ad spend, advertisers have been pretty conservative. They've looked at the year and said, we're not going to grow ad spend by double-digits. We're going to be relatively conservative here. However, that's probably a bit less meaningful to us for the fact that, A, core ad spend, even if it's flat, is probably going to be buying CPMs that are cheaper because there's less supply and demand. And since we're a fixed CPM business, they're probably going to buy more impressions for a lesser CPM rate, and still spend the same budget. So that is the first piece. The second piece is, there's two other ways that we drive revenue. We drive MTM are by covering more

sectors and launching new products. We feel pretty good about the fact that our additional coverage in Social and CTV and the new products that will support those is going to be a great buffer against any core volume degradation that those customers may see on their basic buy.

I think those two things, new products, new sectors that drive MTMs for us. And the fact that even if those customers reduce core spend that doesn't always mean that the number of impressions that they buy go down, particularly in a market where CPMs are getting soft. I think we have pretty good outlook in the fact that advertisers spend may be conservative, but we still have good growth prospects despite that.

Cameron Toler Analyst, JPMorgan Securities LLC

A quick follow-up just on your hiring plans for 2023. Is there any benefit, given the kind of broader layoffs that are occurring across technology for DoubleVerify as far as easing environment to hire into?

Mark S. Zagorski, CEO

It's a great question, and it certainly is a different hiring environment than it was a year ago. I think that provides an opportunity for us to continue to hire great people and do so in a way that's hopefully faster and a bit more efficient. One of the things that we mentioned in the script we continue to see is a huge opportunity out there. It would be silly of us not to take advantage of these greenfield opportunities, where we can win business and where we know our customers, once we land them, are going to be with us for seven to eight years.

As Nicola said, we're going to be thoughtful with our investments. If we see signs that something that gives us pause, we certainly aren't going to continue to lean in. But as of now, we think this hiring environment is good for us. It provides opportunities for us to grow in a really smart way and opportunities for us to grow our business while others are kind of leaning back and hiding. This is a great opportunity for us. We got greenfield wins all over the place and we're going to continue to take them.

Mark Kelley Analyst, Stifel, Nicolaus & Co., Inc.

I was wondering if you could talk about the Retail Media business a bit and just the notion of getting access to maybe some smaller – more mid-sized clients than you historically had. Are you seeing that already or is that just something that you're expecting and that's something that we can maybe count on 2024 and beyond?

And then second, can we get a little bit more color on the OpEx cadence throughout the year or our margin cadence to bridge the gap between 1Q and 2Q given that you've got a bigger return to the office and some other things that maybe weren't embedded into the numbers over the last couple of years? Thank you.

Mark S. Zagorski, CEO

Great question on Retail Media Networks. We noted we are really bullish on that sector. We're excited to be working with the biggest companies out there. Amazon, Walmart, Macy's, Target, Kroger, Best Buy. These are the biggest retail media networks out there. And when we mentioned the access to SMBs, I think it's an added bonus that we never thought would come out of it, which is we work with these guys on the supply side or platform side to help them protect their media.

We help on the activation side, when people are buying through DSPs, or other platforms. But we are also plugged directly into the transactional platforms that these guys are using as well and what that does is it opens us up to a whole bunch of customers that we would really never have access to. In the same way, programmatic platforms like Trade Desk and DV360 opens us up to programmatic buyers that would be too small for us to have direct relationship with. These retail media networks attract a lot of mid-sized OEMs and small manufacturers who we would just have an engagement with.

It has given us a channel partner to tap into these guys. We've seen triple-digit growth last year across Retail Media Networks. We're expecting the same on a relatively small base, but I think a nice growth rate again this year. And again, an added benefit of not just working with these platforms, but getting access to a whole new group of SMBs.

Nicola Allais, CFO

Mark, on your question for the margin cadence, 2022 is a good indicator of what we expect in 2023. The margin profile follows the patterns on the revenue side, which in Q1 is generally the smallest quarter and Q4 is the largest, and the EBITDA side will follow a similar pattern.

Youssef Squali Analyst, Truist Securities, Inc.

First, can you just talk about the level of visibility you have into the business today versus, say, a year ago. Just trying to get a sense of that 23% top line guide for the year, how much of that do you have line of sight into today, maybe existing client spend versus new clients that you have in the pipeline, which I think in the release you talked about being pretty robust?

Nicola Allais, CFO

The visibility we have, as we've said in the past, is really around the measurement side of the business more than on the activation side because for the measurement side of the business, we do need to have visibility into the campaigns that our advertisers want us to measure, and that's generally three months out. We obviously have very high net revenue retention rates, and our gross revenue retention is over 95%. We have a good sense that the recurring base will remain fairly steady and grow. But to answer specifically your question, the direct visibility is really three months out on the measurement side of the business.

The only way it's changed since a year ago is just that activation is a bit more of our total revenue than it was 12 months ago. But the drivers of what we have as visibility remain the same on the measurement side is basically three months out.

Youssef Squali Analyst, Truist Securities, Inc.

And so, would you expect growth in measurement versus growth in activation to be somewhat similar to what you had posted in 2022 – I mean, there's going to be a slowdown, but with the slowdown, how will that be measured across both segments?

Nicola Allais, CFO

The way we're thinking about that question is, is the share of revenue going to change among the three lines of our revenue? Supply side is likely to remain about 10%. If you think about the advertiser piece, more revenue has been going through activation versus measurement just

because that's where the advertisers want to spend their dollars. They want to be on the pre-bid side as opposed to just on the measurement side.

Activation was already 56% of advertiser in 2022, and that was up 5 points. Again, we're a little agnostic, but it's likely to continue to move further towards activation and measurement. Where the big caveat is, if and when Meta, TikTok and Twitter really grow fast, since that's on the social – on the measurement side, measurement will remain very, very healthy for us.

Youssef Squali Analyst, Truist Securities, Inc.

Yes. Makes sense. Lastly, just on CapEx, Nicola, how do you see it for 2023? I know there is a big increase because of HQ. Does it go back to that like \$10 million or so that you were on prior or no?

Nicola Allais, CFO

Yes. The answer is it will go back – you're right to highlight that we had \$30 million or so that was based on going back to the office. We expect it to be in the \$15 million to \$20 million range, and that's really capitalized software costs and some CapEx.