

24-May-2023

LiveRamp Holdings, Inc. (RAMP)

Q4 2023 Earnings Call

CORPORATE PARTICIPANTS

Drew Borst

Vice President, Head-Investor Relations, LiveRamp Holdings, Inc.

Scott E. Howe

Director & Chief Executive Officer, LiveRamp Holdings, Inc.

Lauren Russi Dillard

Interim Chief Financial Officer, Senior Vice President, Finance and Investor Relations, LiveRamp Holdings, Inc.

OTHER PARTICIPANTS

Aaron Flack

Analyst, Susquehanna Capital Management LLC

Elizabeth Porter

Analyst, Morgan Stanley & Co. LLC

Brian Fitzgerald

Analyst, Wells Fargo Securities LLC

Jason Michael Kreyer

Analyst, Craig-Hallum Capital Group LLC

Tim Nollen

Analyst, Macquarie Capital (USA), Inc.

Vasily Karasyov

Analyst, Cannonball Research LLC

Nicholas Zangler

Analyst, Stephens, Inc.

Mark Zgutowicz

Analyst, The Benchmark Co. LLC

MANAGEMENT DISCUSSION SECTION

Operator: Good afternoon, ladies and gentlemen, and welcome to LiveRamp's Fiscal 2023 Fourth Quarter Earnings Call. After the speakers' remarks, there will be a question-and-answer session. [Operator Instructions] As a reminder, this conference call is being recorded.

I would now like to turn the call over to your host, Drew Borst, Vice President of Investor Relations. Please go ahead.

Drew Borst

Vice President, Head-Investor Relations, LiveRamp Holdings, Inc.

Thank you, operator. Good afternoon and welcome. Thank you for joining our fiscal 2023 fourth quarter earnings call. With me today are Scott Howe, our CEO; and Lauren Dillard, Interim CFO.

Today's press release and this call may contain forward-looking statements that are subject to risks and uncertainties that could cause actual results to differ materially. For a detailed description of these risks, please read the Risk Factors section of our public filings and the press release. A copy of our press release and financial schedules, including any reconciliations to non-GAAP financial measures is available at liveramp.com. Also, during the call today, we'll be referring to the slide deck posted on our website.

At this time, I'll turn the call over to Scott.

Scott E. Howe

Director & Chief Executive Officer, LiveRamp Holdings, Inc.

Thanks, Drew, and thanks to all of you for joining our call today.

Now, there are three key points I hope you take from today's call. First, our business model is consistent and durable. Our Q4 financial results were broadly in line with our expectations despite a challenging macro environment, and we delivered strong operating profit growth and margin expansion.

Second, we think we've positioned ourselves for top line acceleration in future quarters. We aspire to be a true Rule of 40 company, and we've historically achieved consistent double-digit top line growth rates. As a subscription business, our current growth rate can be traced to the disappointing leading indicators of several quarters ago. Likewise, the more promising leading indicators we are seeing now, if we continue to maintain our trajectory, suggest gradual revenue acceleration throughout fiscal year 2024 and beyond.

Finally, as we have consistently done, we're going to continue to improve operating profit and return capital to shareholders. We delivered a significant improvement in operating margin in FY 2023, and we expect to do so again in FY 2024.

Starting with Q4, while results were in line with our guidance on the key financial metrics, including revenue, gross profit and operating profit, we are not satisfied with our performance and have implemented programs to accelerate our top line growth while also ensuring consistent margin improvement. We're starting to see nice progress on our leading indicators, so I'll share some of those successes with you today as well.

Q4 total revenue grew by 5% year-on-year, with Subscription revenue also up by 5% and Marketplace & Other revenue up 6%. While revenue was in line with our guidance, the growth rate is not up to our standards. The Q4 revenue growth reflects the weakness in last year's Q1 and Q2 bookings that we've discussed on past calls. This slowdown was the result of a dislocation in our sales capacity and productivity, following elevated sales staff turnover during the Great Resignation in late 2021, combined with a more challenging macro economy.

Our Q4 customer count of 920 was up by 10 from the prior quarter, driven by large enterprise customers with above-average ACVs. Our \$1 million-plus customers increased by one sequentially, while our \$0.5 million to \$1 million customers increased by 16. We had a six-figure new client win with a major digital marketing agency for data onboarding and identity resolution products. We also signed a three-year high-six-figure contract with a national home improvement retailer for our identity resolution products for use in their retail media network.

Q4 was an especially strong quarter for upselling existing customers to the LiveRamp data collaboration platform, or what was formerly branded Safe Haven. In fact, this was the strongest quarter for our collaboration platform contract signings in over a year. We had five customer upsells, each with an incremental ACV of \$1 million or more. Three of these deals were with national retailers to support their growing retail media networks. The other two upsells were data collaboration use cases outside the retail sector, demonstrating that commerce networks are not limited to the retail CPG complex.

We had an upsell with a global travel and hospitality customer and also a major automotive manufacturer. The auto upsell is an eight-figure multi-year deal to enable data collaboration between the corporate auto OEM, the dealerships, and the regional advertising group. The data collaboration will enable more effective and efficient advertising across these three related yet-independent organizations and improved the customer experience, fortify brand loyalty, and reduce customer acquisition costs. This is especially exciting because, not only is this

use case applicable to the other auto OEMs, it is also applicable to other franchise business models. Please see the appendix of our earnings slides for additional details on this auto use case.

The most disappointing statistic of this past quarter was our net retention. Subscription net retention of 97% and platform net retention of 99% reflected downsell in customer attrition, mostly from non-enterprise customers being pressured by the macro environment. We would like to see a net retention comfortably over 100%, with 110% or more being the goal we want to surpass. Over the past year, we've implemented a number of client-facing changes, so we think this is our low watermark.

On the product side, we've introduced enhancements that improve the speed, reliability, and functionality of our most widely used products. On the service side, we've implemented early warning dashboards to highlight clients that may be at risk, tightened our customer segmentation, and improved our service coverage and model. Recent upsell trends give us confidence that our net retention rate will improve throughout FY 2024.

Moving beyond the quarter, let me provide an update on some of the key leading indicators for our revenue growth, which is a primary focus for us and, you, our shareholders. We think there are multiple levers that can get us back to our historical double-digit top line growth, and we've been making progress across all of them.

Let me quickly touch on five of these revenue drivers now. One, we've meaningfully increased our sales capacity. As we enter FY 2024, the number of ramped reps, defined as a rep with at least six months' experience, is at an all-time high and is currently 25% over our quarterly average throughout FY 2022.

To put this improvement in perspective, in the fiscal first half of FY 2023, our ramped reps were approximately 20% below the FY 2022 average. So our sales capacity has not just recovered, it has expanded over the past year. And we now have the right level of sales capacity to drive stronger bookings, which is one of the key components of ARR and other revenue growth metrics.

Second, our bookings pipeline has grown. And I like the fact that it's also seemingly increased in quality and grown with new logos. Our new logo pipeline is the highest in over a year and is nearly 20% higher than the average FY 2023 pipeline. Importantly, because we've tightened our ideal client segmentation criteria, we're more confident that the clients we sign will remain clients for the long haul.

Third, our sales productivity has increased. Capacity and pipeline alone will not accelerate revenue growth. Higher sales productivity is required. And here, we are also seeing encouraging trends. Our newest sales reps, the ones hired within the past year, continue to make great strides. They have gotten better over time with their collective bookings more than double the fiscal first half. And they're also good, producing 30% more bookings than their predecessors from the prior year.

And these productivity improvements aren't limited to our newest hires. Across the entire sales force, the proportion of sales reps, who signed deals in Q4, was 9 percentage points higher than the fiscal first half quarterly average and 10 points higher than a year ago.

Fourth, we're seeing early momentum from our partner channel. In March, we hosted our annual customer conference, RampUp, bringing together leaders from the world of marketing, advertising, technology, and media. This was our first exclusively in-person RampUp since 2020 and attracted over 2,000 attendees, 130-plus speakers and presenters, and 200-plus client meetings. The customer feedback was overwhelmingly positive. We made several important announcements at RampUp, covering new sales partnerships and product integrations that will make our products even more accessible for customers and will, ultimately, help stimulate top line growth.

First, we announced an expanded partnership with Snowflake to upgrade our product capabilities that are natively built on their platform. Last year, we natively integrated our identity solutions into Snowflake. Now, we have done the same for our data activation solutions, along with an easy-to-use, marketer-friendly user interface that allows customers to easily activate hundreds of marketing and media destinations directly from Snowflake.

In addition, we announced a new sales partnership with Snowflake that will allow us to leverage Snowflake's significant scale of over 3,000 sellers and nearly 8,000 customer relationships. We expect this relationship to be especially helpful with our new logo acquisition. 50% of our top customer prospects are already Snowflake customers, equating to hundreds of potential new LiveRamp customers. Additionally, we expect the partnership will accelerate our sales cycle and lower our cost of acquisition. These benefits should start materializing in the second half of FY 2024.

We also announced a new partnership with Adobe's Real-Time Customer Data Platform, one of the largest CDPs in the market, to natively offer LiveRamp's people-based identifier, RampID. Marketers will now be able to activate their customer data on RampID via downstream activation partners, including DSPs, SSPs, CTV destinations and other premium publishers.

In the year just ended, we generated approximately \$10 million in bookings from our cloud partnerships alone, all of it incremental to the year prior. We expect that this will be an even stronger revenue driver for us in the coming year, given the partnership progress we have made in recent months.

And fifth, we're expanding the utility of our core subscription offering. Recently, Google confirmed its previously announced timeline for deprecating third-party cookies in Chrome in the second half of 2024. We think this will be a catalyst for more brand marketers to engage in data collaboration and leverage ATS to maintain reach, addressability, and high return on ad spend across the open Web.

As Google prepares for the final deprecation of Chrome cookies, LiveRamp is playing an important role. Last year, Google announced that we would be one of a select number of clean room launch partners for Publisher Advertiser Identity Reconciliation, or PAIR. Google's PAIR allows publishers and advertisers to securely reconcile their first-party data for marketing use in Google's DSP, DV360, without the use of cookies.

We continue to make progress on our partnership with Google. Earlier this month, we began testing PAIR with publisher partners. Using Google PAIR, these publishers will be able to securely and privately reconcile their first-party data with marketer first-party audiences. Brands customers, meanwhile, will be able to transact on DV360 without the need for third-party cookies.

We think this is a final inflection point for the migration from cookies to authenticated permission-based destinations that LiveRamp has long seen coming. LiveRamp has always made it safe and easy for its clients to use their data at a wide variety of different destinations, and the vast majority of these destinations are now authenticated and addressable. We work with over 165 DSPs and SSPs, nearly 70% of the top 100 Comscore publishers, over 14,000 domains. ATS publisher integrations now account for more than 90% of US consumer time spent online.

Today, more than 75% of our customers are already buying on RampID or our direct cookieless integrations. And we believe Google's definitive migration announcement will further establish LiveRamp as the industry standard.

I just shared a lot of leading indicator numbers with you, but I think the important thing is that they are all trending in the right direction.

To summarize top line growth trends, we're operating in a challenging macro environment, but we are controlling and improving what we can control. We've expanded our sales capacity, built a more robust pipeline, created a channel partner motion, and are knitting LiveRamp into the very fabric of the ecosystem with our ever expanding array of destinations and use cases. We want to position LiveRamp as a true Rule of 40 company with double digit top line growth rates, complemented by strong operating margins.

The leading indicators for our revenue growth are encouraging. And if there is just one statistic that epitomizes our ARR momentum, it's this. In the fiscal second half, our bookings were 30% higher than the fiscal first half. Increased bookings along with lowered contraction will fuel top line growth.

Revenue growth is obviously a top priority and an important lever in the Rule of 40 calculation, but so too is bottom line growth and building a reputation for good cash stewardship. So before wrapping up, let me touch on this final topic.

Amidst slower revenue growth, we have acted swiftly to reduce operating costs and drive strong bottom line growth and margin expansion. We have a long and established track record of delivering steady operating margin improvement.

Over recent years, we moved from a negative non-GAAP operating profit of negative \$60 million in FY 2017 to a positive \$60 million or 10% margin in FY 2023. During that time, revenue grew by \$422 million and operating profit increased by \$121 million. And we're not done; no, we're not done. In FY 2024, we expect to deliver approximately 500 basis points of margin expansion, translating to 50% year-on-year growth. Lauren will provide additional details in a moment.

In addition, we continue to return excess free cash flow to shareholders through our share purchase program, which was upsized and expanded last December. During FY 2023, we spent \$150 million repurchasing our shares, which resulted in a 4% decline in our FY 2023 average diluted shares. In FY 2024, we expect to use a substantial portion of our free cash flow for share repurchases. And fiscal year-to-date, we have already repurchased 12 million. At current valuation levels and factoring for our progress on the leading indicators I've discussed, we think repurchasing our shares is a prudent investment.

In summary, we delivered an in-line quarter in a still challenging macro economy. But more importantly, we enter FY 2024 with stronger bookings momentum, new partnerships and new integrations that give us confidence we can deliver improving revenue growth in FY 2024. Despite slower top line growth in Q4, we delivered meaningful operating profit growth and margin expansion, and we expect to do the same in FY 2024. Finally, we expect to use a substantial amount of our FY 2024 free cash flow for share repurchases.

Thank you, again, for joining us today. And a special thanks to our exceptional customers, partners and all the LiveRampers across the globe for their ongoing hard work and support. We look forward to updating you on our progress in the coming quarters.

And with that, I will now turn the call over to Lauren.

Lauren Russi Dillard

Interim Chief Financial Officer, Senior Vice President, Finance and Investor Relations, LiveRamp Holdings, Inc.

Thanks, Scott, and thank you all for joining us. Today, I will cover two topics: first, a review of our Q4 financial results; followed by our outlook for FY 2024 and Q1.

Starting with the Q4 results. In summary, results were broadly in line with our expectations. Revenue was near the midpoint of our guidance range, while operating income was at the high-end of the range after adjusting for the accelerated RSU vesting that was not factored into our guidance. More on that later. Operating margin expanded by nearly 8 percentage points year-on-year, and we generated \$31 million in operating cash flow.

Now, let me fill in some additional details. Please turn to slide 5. Unless otherwise indicated, my remarks pertain to non-GAAP results and growth is relative to the year-ago period. Total revenue was \$149 million, up 5%. Subscription revenue was roughly in line with our expectations. And Marketplace & Other was slightly ahead, driven by a better-than-expected advertising environment in February and March.

International revenue was up 4%, inclusive of a 5 point headwind from foreign currency. Subscription revenue was \$121 million, up 5%. ARR was \$424 million, up 6%. Subscription net retention was 97%, and platform net retention was 99%.

The decline in the Subscription revenue metrics was broadly in line with our expectations and reflects a combination of soft bookings in the first half of FY 2023, as our new salespeople ramped, as well as some incremental downsell activity in the quarter with non-enterprise customers. Both factors in part, if not largely due to a challenging macro environment.

Current RPO, or our next 12-month contracted backlog, was \$338 million, up 9%. Total RPO, including contracted backlog beyond the next 12 months, was up 19% to \$471 million due to several large multi-year renewals, such as with our largest customer, IPG, as we discussed on our last call, and a major auto manufacturer, as Scott mentioned.

Digging into Subscription further, our fixed subscription revenue grew by 7% in the quarter. Subscription usage revenue represented 13% of total Subscription revenue, down from 15% a year ago and declined by 8%, resulting in a 1 point drag on total Subscription growth; a reversal from the recent trend. This decline mostly reflects a difficult comp and quarterly variability that is typical of this revenue. While down, the usage revenue mix was still near the midpoint of the 10% to 15% historical range.

Marketplace & Other revenue of \$28 million increased 6%, driven by Data Marketplace, which represents roughly 80% of our Marketplace & Other segment. This performance reflects the decline in January and growth in February and March, a growth pattern broadly consistent with the overall digital advertising market.

Moving beyond revenue. Gross margin was approximately 75%, down slightly from prior year, due primarily to higher data hosting from customer use and parallel costs related to customer migration projects, as well as continued investment in our services business. Operating expenses were down 8% to \$97 million, driven by the cost actions taken in November. Q4 was the first quarter we're saving from these actions, which we expect to total \$30 million annualized, consistent with our prior comments. Operating income was \$14 million, up from \$3 million a year ago. And our operating margin expanded by nearly 8 points to 10%.

In Q4, we decided to accelerate the vesting of certain non-NEO RSUs that would have otherwise vested over the next six months to take advantage of cash tax savings of roughly \$8 million in FY 2023. This resulted in an additional \$2 million of payroll tax expense in the quarter, which was not contemplated in the guidance we provided on our last call.

Stock-based compensation was \$55 million, including \$23 million from the accelerated vesting and \$22 million of ordinary stock-based comp expense, consistent with our guidance. Operating cash flow was \$31 million, down from \$59 million a year ago, due primarily to a difficult comp from an IRS tax refund. We did not repurchase any shares in the quarter. But in FY 2023, we repurchased 6.1 million shares for approximately \$150 million.

Additionally, since March 31, we repurchased 12 million in stock, and there is currently 206 million available under our authorization.

In summary, while Q4 was broadly in line with our expectations, the bookings pressure we felt in the first half of FY 2023, coupled with an uncertain macro, weighed on our top line performance metrics in the quarter. That said, beneath the top line, we continue to drive margin improvement and, in the fiscal year, again returned meaningful capital to shareholders through our buyback.

Looking ahead, we're encouraged by our recent sales momentum and are focused on the initiatives Scott outlined to reaccelerate growth as we move through the year, which is perhaps a nice segue to our FY 2024 and Q1 financial outlook.

Please turn to slides 12 and 13. Please keep in mind, our guidance excludes intangible amortization, stock-based compensation, and restructuring and related charges. Starting with the full year, we expect revenue of between \$610 million and \$620 million, up 2% to 4% year-on-year. We expect Subscription revenue to grow mid-single digits, inclusive of a 1 point headwind from usage. Usage as a percentage of total Subscription revenue is expected to be just below the midpoint of the historic 10% to 15% range versus 14% in FY 2023.

Our outlook for Subscription growth assumes a steady improvement in net retention throughout the year and for it to be above 100% by Q4. However, we have not embedded in the guide a hockey stick improvement in bookings, even though we are optimistic that the improved sales productivity and the new partnerships and integrations Scott discussed will benefit second half Subscription growth. Of course, the potential offset to this benefit, in addition to our own execution, would be the macroeconomic conditions.

We expect Marketplace & Other revenue to be approximately flat, which is slightly better than our previous expectation of flat to down. We're upgrading our growth outlook based on what we're currently seeing in our business. After the softness in December and January, we have seen better growth in February, March and April, consistent with the growth in the overall digital ad market.

To be clear, however, flat Marketplace revenue still does assume a slight degradation in the current advertising market over the balance of our fiscal year. We do this in the name of conservatism in a still uncertain economy and not because we have a better crystal ball on the economy or the ad market. Advertising is inherently a short duration business, which means we have less forward visibility on our Marketplace as well as Subscription usage.

In this macro environment, performance is more variable than normal, as demonstrated by our recent results. Should the economy and advertising markets hold steady with the current condition or even strengthen over the balance of FY 2024, then we would expect to do better in both Marketplace and Subscription usage. To be balanced, the inverse would naturally also be true.

We expect a gross margin of approximately 75%, in line with FY 2023. However, in the fiscal first half, we expect gross margin to be roughly 73%; and in the second half, expect margin to improve to approximately 76%. The first half margin reflects incremental investments in our identity graph to support our cloud capabilities and in our services business, with payback starting to materialize in the second half, particularly in services and hosting.

We expect non-GAAP operating income of between \$90 million and \$93 million, up roughly 50% year-on-year and representing a margin of 15%, up approximately 5 percentage points. Operating expenses are expected to decline by mid-single digits, reflecting the savings from the prior year cost actions, as well as ongoing optimization initiatives.

Looking out to FY 2025, we expect another year of significant margin expansion, similar to FY 2024, driven by an offshoring initiative that we will implement in the fiscal second half. We expect stock-based compensation to be \$78 million, which benefits from the \$23 million in accelerated vesting in FY 2023. We expect GAAP operating income for the first time to be positive and to be between \$3 million and \$6 million. Lastly, we expect to return a significant amount of our FY 2024 free cash flow to share owners through our repurchase program. We believe this is a great investment and will largely offset the impact of forecasted dilution.

Now, moving to Q1: we expect total revenue of \$147 million; non-GAAP operating income of \$15 million; and an operating margin of 10%, up 7 percentage points year-on-year. A few other call-outs for Q1, we expect Subscription net retention to be roughly flat to Q4, give or take a point. In Q1, we expect gross margin to be approximately 73%, as we discussed earlier. And we expect stock-based compensation to be approximately \$18 million.

Before opening the call to questions, I'll conclude with a few final thoughts. We had a solid quarter in line with our expectations, despite a choppy and challenging environment. Our Q4 operating margin expanded meaningfully, and we expect 5 points of further margin expansion in FY 2024 and a similar level of improvement again in FY 2025.

We have line of sight to stronger top line growth in the fiscal second half, driven by our recent bookings performance and new partnerships and initiatives, such as with Snowflake and Google PAIR, that should gain market traction in the coming quarters. And finally, we have attempted to be conservative and cautious as it relates to our FY 2024 outlook, but we see upside potential if our bookings trends continue on the current trajectory and if the current ad market conditions hold for the balance of our fiscal year.

With that, on behalf of all LiveRampers, thank you for joining us today. And thank you to our amazing customers. Operator, we will now open the call to questions.

QUESTION AND ANSWER SECTION

Operator: Thank you. [Operator Instructions] One moment, please, for your first question. Your first question comes from the line of Shyam Patil with Susquehanna. Please go ahead.

Aaron Flack

Analyst, Susquehanna Capital Management LLC

Q

Hey. This is Aaron on for Shyam. Thank you for taking our question. We have two. First, can you provide some additional details on the rollout of Google PAIR and the impact this could have in FY 2024 and beyond?

And secondly, is there any more color you can share on the sales pipeline and deal cycle environment right now, specifically anything you can call out on the lengths of the sales cycle would be helpful? Thank you.

Scott E. Howe

Director & Chief Executive Officer, LiveRamp Holdings, Inc.

A

Sure. Aaron, it's Scott. And I can answer both of those. First off, with respect to your question on Google PAIR, above all, we're excited that Google finally confirmed the timing for the eventual deprecation of cookies, because I think that was just an uncertainty that was hanging over the industry's head for a couple, three years now. Now, this is something we've been thinking about for far longer than that. I mean we've been preparing for a cookieless future really for the last five years and our belief was that – the keys are consumer control and authentication. And so, that's what we built our technology on.

When Google announced PAIR, which, once again, stands for Publisher Advertiser Identity Reconciliation, they followed the same principle. And they announced us, I guess, was last quarter, as one of their partners for the launch. And there's a couple of others, but we are, by far, the largest. We have been in testing; to be fair, alpha testing. And I don't want to get in front of any news Google might want to share. But what I would tell you is that in alpha testing, we've hit every single one of the milestones we set out for ourselves. We're currently live with a handful of publishers. By summer, we think that will expand to 100-plus publishers and 25 advertisers.

But make no mistake, it will be a slow ramp. Google's timeline for cookie deprecation is in calendar 2024, and it's a slow ramp. So, I think you'll see gradual progress on this. What I think more than anything that this has done is it's confirmed for the entire world that this is real.

Now, DV360 is one of the biggest sources of media volume on the planet. And so, anybody who wants to continue to buy on DV360 by addressable audiences is going to have to do it with PAIR. So, a year from now, I think it will really start to gain traction, and we think the benefit to us over time could be new subscription volume and clients. Every single one of our advertisers today, virtually all of them, would have Google on their media plan. But there are a lot of advertisers in the world that we don't work with. And so, this is a natural inroads to work with a number of new clients.

And then, second is, I think, that this development of PAIR, the kind of clean room functionality that it requires is going to drive more data collaboration use cases. And again, that's something that we've really been out and front on. And I think it will spur more demand over time for us and also for the public clouds. That is not baked into our guidance for this year. Any head start we get on that would be upside. We think that the bigger volume comes next year.

On the second question, sales pipeline; I walked through a number of the leading indicators, and we're generally pretty pleased. But that said, I would tell you that we are seeing a change with the macro environment right now. And I think it's manifested itself in a couple ways. One is the sales pipeline is longer, probably a few months longer than it historically has been.

And in addition, we're seeing a change in kind of the – I would say it is a – the market power dynamics have changed a little bit and as much as procurement teams or being a little bit more aggressive with their payment terms and other conditions. Now, that's offset somewhat by the fact that every marketer on the planet in tough times wants more addressability and accountability in their media plan. So, we become more important in some sense, but procurement departments have a little bit more leverage.

The final thing I'll say, and this is pure anecdote, Aaron, but what we're hearing from our frontline reps is that some of these procurement departments actually have staffing challenges. And there have been a lot of head count actions in the tech space in particular, but more broadly, across the marketing world. And I think that's hit on some of these procurement departments because it's taken a little bit more time to get contracts redlined to get responsiveness, and it's a sort of staffing shortage. So, all this to say is macro headwinds for sure, but despite that, I like where we're positioned. I think things are moving in the right direction.

Aaron Flack

Analyst, Susquehanna Capital Management LLC

Thank you, Scott. Very helpful.

Operator: Your next question comes from the line of Elizabeth Porter with Morgan Stanley. Please go ahead.

Elizabeth Porter

Analyst, Morgan Stanley & Co. LLC

Great. Thank you very much. So I first just wanted to get a little bit more color on guidance. The opportunity to accelerate revenue growth for the year versus the guide for about 3% growth in both Q1 and the full year, despite NRR improving, kind of growing contribution from sales capacity and partners. So, was hoping to get more guidance on what are some of the factors that you are assuming actually get more or less difficult from what you saw in Q4. And then, I have a follow-up.

Lauren Russi Dillard

Interim Chief Financial Officer, Senior Vice President, Finance and Investor Relations, LiveRamp Holdings, Inc.

Sure. Thanks, Elizabeth. I'm certainly – I'm happy to take that and I would start with by just acknowledging at a high level. As we mentioned in our prepared remarks, we do believe our guidance is conservative and we think there is some potential upside.

So, first, let me address the subscription guide. We're pleased with the recent bookings improvement, as Scott mentioned. And our guidance assumes a steady continued improvement in bookings throughout FY 2024, but it does not assume a hockey stick improvement. It acknowledges that we are still operating in a tough macro. And as we just discussed, it also does not assume significant contribution from some of our newer initiatives like Google PAIR, as an example. So, should those newer initiatives, whether it be PAIR or the progress we're making with our cloud partners, gain market traction earlier in the year, that could present some nice upside to our Subscription outlook.

In addition, as it relates to subscription usage and Data Marketplace, as we shared in our prepared remarks, we've attempted to be appropriately conservative here. Our Marketplace guide does assume the growth rate we've seen over the last couple of months moderates. So, should current trends in advertising hold or even strengthen throughout the balance of the year, we would expect to see some upside in Data Marketplace and potentially also in Subscription usage.

Elizabeth Porter*Analyst, Morgan Stanley & Co. LLC*

Great. And then, on the SMB churn side, sounds like that continues to be a headwind. So can you just help us understand how big this group is from kind of an ARR revenue standpoint? And should we think about this group as a continued drag as you prioritize more profitable enterprise accounts, or should we expect some stabilization or improvement as new channels might be helpful to address this more SMB base?

Lauren Russi Dillard*Interim Chief Financial Officer, Senior Vice President, Finance and Investor Relations, LiveRamp Holdings, Inc.*

Yeah. I'm happy to take that one, too, Elizabeth. And as a reminder, and I think we've discussed this on past calls, SMBs as a percentage of total revenue represent less than 25%. In Q4, contraction was really a reflection of the macro environment. We look at contraction very carefully and have a good handle on the reasons for it. Q4 is, typically, our highest renewal quarter. And here's where we really felt the impact of recessionary pressures in the form of downsell with our tech platform customer base. So think ad tech platforms, other kind of ad tech intermediaries, whose models are just more sensitive to overall trends in advertising. In fact, I believe, in the quarter, this drove more than 50% of the increase in contraction.

That said, as we've said in the past, outside of the macro, we continue to believe contraction represents an opportunity for the business and have several initiatives underway, both from a product and support standpoint, which, we believe, will improve contraction as we move through the year. So we do expect it, Elizabeth, to stabilize, based on everything I just mentioned.

Elizabeth Porter*Analyst, Morgan Stanley & Co. LLC*

Great. Thank you so much.

Operator: Your next question comes from the line of Brian Fitzgerald with Wells Fargo. Please go ahead.

Brian Fitzgerald*Analyst, Wells Fargo Securities LLC*

Thanks, guys. Maybe some more tactical color on the Snowflake partnership. I think you've talked about 200 large accounts within the Snowflake client base. Anything you could tell us about how building out and approaching the opportunity pipeline? And anything you could tell us about how you're already working alongside the Snowflake seller base or plans to go to market there? Thanks.

Scott E. Howe*Director & Chief Executive Officer, LiveRamp Holdings, Inc.*

Yeah. Hey, Brian. It's Scott. It's interesting. I don't want to overrotate on Snowflake because this is really a broader cloud channel strategy. And I think I mentioned, last year, we really got this effort going and we ended up with about \$10 million in incremental bookings, and that's up from nothing because we didn't have a channel

partner program. That said, if you look at the past year, the vast majority of the effort – the success we had really came from being included with GCP, both natively and then also in their marketplace. Going forward, our belief is that our success with GCP will extend to – Snowflake and AWS, I think, will be the first two that we'll see a lot of progress with, followed by Azure and Databricks as well. And in each case, I would tell you that those partners are really leaning in.

It starts with collaboration around target clients. In most cases, our partners have offered up incentives. So, as an example, it is fairly typical that if someone were to engage in a LiveRamp subscription, the channel partner would retire quota themselves from, like, GCP or Snowflake quota. They do that because we drive pretty significant amounts of compute for them. And it's kind of a broader trend. It's cloud and AI, all those things require massive amounts of data to use effectively. And so, it's been beneficial to us and beneficial to the partners.

And I think we're pretty high on their radar screen. I know some of your colleagues – I can't remember if you were there, Brian – came to RampUp. And those were some of the partners that were on stage with us, presenting and doing workshops with clients. So it's not just a high-level contract. It has become very tactical and very operational.

But let me end by caveatting, it's really early. We're talking about six to nine-month sales cycles potentially. So even as this starts to scale, we really won't see the bookings come in until the back half of the year, and you won't see an impact in revenue until going into next year.

Brian Fitzgerald

Analyst, Wells Fargo Securities LLC

Thanks, Scott. Very helpful. And yeah, we did catch a lot of that out at RampUp. So appreciate it.

Operator: Your next question comes from the line of Jason Kreyer with Craig-Hallum. Please go ahead.

Jason Michael Kreyer

Analyst, Craig-Hallum Capital Group LLC

Thank you, guys. I just want to reconcile the puts and takes around Subscription growth. I think we've talked a lot about the higher attrition rates in 2022 kind of impacting bookings over the last quarter. Scott, I thought it was helpful that you mentioned the longer sales cycles earlier. And just, as we look to the numbers exiting this year still with Subscription growth kind of in that low-single digit rate, what are the other puts and takes that are around that, that we need to consider kind of outside of attrition, outside of sales cycles? And maybe what are the drivers that we want to highlight that could push that number higher?

Lauren Russi Dillard

Interim Chief Financial Officer, Senior Vice President, Finance and Investor Relations, LiveRamp Holdings, Inc.

I'm happy to take this one. And Scott, feel free to follow up. Right. Our results in the quarter was largely impacted by the bookings pressure we felt in the fourth quarter of FY 2022 and through the first half of FY 2023. So I think while we're pleased with our recent bookings progress, as a Subscription business, it's going to take a few quarters for us to lap the bookings pressure we felt in the early part of last year and for our recent bookings momentum to really benefit our top line results. And we talked about things that could potentially drive bookings higher in the early part of the year, which would have a benefit on our total Subscription growth rate for FY 2024.

In addition, would highlight Subscription usage, which does represent 10% to 15% of total Subscription revenue. We are assuming that this revenue source is down in FY 2024. As we mentioned, given this lack of forward

visibility here, we've attempted to be conservative. So we're assuming down growth, which is both a reflection of the macro and then also a reflection of some one-time items that benefited FY 2023, which we just don't expect to repeat in FY 2024. Again, I would go back to an earlier comment I made, which is, should macro trends or trends in digital advertising hold or improve, we could see some upside to Subscription usage, which, of course, would benefit our overall Subscription rate as well.

Jason Michael Kreyer*Analyst, Craig-Hallum Capital Group LLC*

Okay. Thanks, Lauren. I wanted to follow up with one just on Google and cookie deprecation. Curious, if there's any way to handicap how much of the industry has already moved beyond cookies to other kind of advanced targeting mechanisms? And I'm assuming there's still an opportunity to tap into some of the late adopters? Just wondering if you have any sense for how big of an opportunity that could be?

Scott E. Howe*Director & Chief Executive Officer, LiveRamp Holdings, Inc.*

Yeah. For larger advertisers, they've moved beyond. And I say that because already well over 70% of our destinations are fully cookie proofed. If you want to buy on most social platforms, for instance, it's a direct authenticated integration. That is also increasingly true with the Open Web. I can't remember the exact stat, but it's overwhelming. It's either 49 of 50, or now it might be all 50 of 50 of the top 50 comScore publishers have established some form of authentication.

And so, all this to say is it is increasingly easy for advertisers to buy addressable authenticated inventory. For smaller advertisers, they may not be doing that. They are more likely to just go direct to DV360, use one of the major DSPs that might still be heavily reliant on cookies. And so, they've been the slowest to migrate. They are going to be forced to a year from now. And so, I do think there's an inflection point where we can have a lot more success with SMBs simply because they will be forced to cast a wider net to get the kind of online volume that they want.

For sophisticated, call it the top few hundred advertisers on the planet, again, I think they've already moved beyond this. And not only are they starting to buy addressable, but they are thinking hard about their own first-party data strategies and how do they collaborate with other companies that have good first-party data. And that's what's driving a real potential in clean rooms across the industry and interest in our data collaboration platform. So I think brighter days ahead.

Jason Michael Kreyer*Analyst, Craig-Hallum Capital Group LLC*

Thank you.

Operator: Your next question comes from the line of Tim Nollen with Macquarie. Please go ahead.

Tim Nollen*Analyst, Macquarie Capital (USA), Inc.*

Hey, everyone. Thanks for taking the question. Scott, I've got a quick follow-up to the last question, then I actually got a numbers question for Lauren. The follow-up on the Google cookie deprecation is basically, what do you think, Scott, will be the overall market response when this actually happens? I mean, I heard everything you just said. But when GDPR came about, for example, in 2018, I remember there was just like a market freeze up, even

though everyone also knew that was going to come. Do you think some sort of a market reaction may take place or do you think really even the smaller advertisers will be far enough along at that point that will it all be okay?

Scott E. Howe

Director & Chief Executive Officer, LiveRamp Holdings, Inc.

A

Yeah. Well, it's interesting. You mentioned GDPR, because I actually was using the same example internally. And in GDPR – or even if you go back to – I was in the industry when Y2K happened, and literally it felt like there was a sprint at the end before both of those because clients just weren't ready and then they've covered a lot of ground in the final couple months. I think for smaller advertisers, we're going to see a similar pattern here. Quite frankly, they are not who we might be prioritizing anyway for any kind of alpha testing.

With sophisticated advertisers and the largest publishers, make no mistake about it, Google is so important to the ecosystem. The advertisers are relying on DV360 for reach. Publishers are relying on DV360 for yield. And so, they are the first in line to alpha and beta test this. And I think Google, by having such a long migration period and being so definitive about when it's going to happen next year, has really paved the way for minimal disruption to occur in the industry.

Tim Nollen

Analyst, Macquarie Capital (USA), Inc.

Q

Great. My question for you, Lauren, is the number that sticks out the most to me in your report today is actually the GAAP OI positive guidance for fiscal 2024. I don't think you've even had a GAAP OI positive quarter ever as far back as I can see; correct me if I'm wrong. But maybe if you could explain a little bit, like, if you're talking 2% to 4% revenue growth and you're still looking toward positive GAAP OI, what are the drivers of that? Is it the cost savings program that you put through that helps this much? Is it the SBC going to be lower? I assume it's those – anything else? And then, if your – fiscal 2025, you implied more upside to come. Is there any more color you could give us in terms of what we may expect in margins beyond 2024 even? Thanks.

Lauren Russi Dillard

Interim Chief Financial Officer, Senior Vice President, Finance and Investor Relations, LiveRamp Holdings, Inc.

A

Yeah. Happy to take that one, Tim, and thanks for the question. It's something, internally, we are quite proud about. In large part, both our non-GAAP and GAAP operating performance is benefiting from the cost actions we took in November of FY 2023, in addition to just ongoing optimization initiatives we've implemented. In addition, and to be balanced, our GAAP results this year will benefit from lower stock-based compensation as a result of the accelerated stock comp expense we incurred in Q4 of FY 2023. And then, just a final note. We did have some restructuring charges in FY 2023. We don't expect or have not contemplated further restructuring charges in our 2024 guide.

Tim Nollen

Analyst, Macquarie Capital (USA), Inc.

Q

Okay. Anything on 2025, you could offer up any further color – further upside from the 2024?

Lauren Russi Dillard

Interim Chief Financial Officer, Senior Vice President, Finance and Investor Relations, LiveRamp Holdings, Inc.

A

Yeah. It would be premature to kind of size the upside today, Tim. But I would go back to a couple of comments I made in my prepared remarks. We think we have additional levers to continue to expand margin in FY 2025 and beyond. One of which is the offshoring initiative that I mentioned earlier. In addition to that, of course, we have

continued just optimization efforts, which, we believe, will drive greater operating performance and margins in the coming year as well.

Tim Nollen

Analyst, Macquarie Capital (USA), Inc.

Great. Thanks. I know that's something you've been striving for, for a while. So look forward to seeing that next year. Thanks.

Lauren Russi Dillard

Interim Chief Financial Officer, Senior Vice President, Finance and Investor Relations, LiveRamp Holdings, Inc.

Yeah. Thank you.

Operator: Your next question comes from the line of Vasily Karasyov of Cannonball Research. Please go ahead.

Vasily Karasyov

Analyst, Cannonball Research LLC

Thank you. Good afternoon. Scott, on the prepared remarks, you said that – about retail media networks that your recent initiatives proved that retail media is not limited to CPG complex. I think I did not misquote you here. Can you elaborate, please, on what you mean here? And a quick follow-up, just to clarify the terminology. When you talk about retail media, do you separate retail media and shopper marketing? And if you do, how is that different for you? How do you get involved in either of those, or is it the same thing for you? Thank you.

Scott E. Howe

Director & Chief Executive Officer, LiveRamp Holdings, Inc.

Yeah. Vasily, I'd tell you, first off, I think we're not alone in thinking that retail media networks are kind of a limiting name. To me, they're commerce networks. And the same things that you can see take place. I mean, it's all about data collaboration, right? And a natural first place to do it, given how complementary retailers and packaged goods providers are, was the whole concept of retail media networks because the retailer has a store purchase information. They have sophisticated concepts like merchandising and thinking about – it's beyond just the store, but it's the website as well now. And the packaged goods companies were spending pretty significantly and their co-op budgets could be made far more effective through data collaboration.

Well, those conditions, where collaboration could unlock benefits for all, extend far beyond just retail media. So, in the travel space, for instance, think about how many travel partners that you might utilize, whether it be airlines or rental cars or hotel companies. What an incredible opportunity for them to collaborate. Connected car – almost all the cars we buy today have pretty sophisticated user interfaces in the dashboard. And so, to the extent that you're using your car to nav to a gas station or a retailer, what an incredible opportunity for the OEM to collaborate with retail.

And even the example I shared earlier, where I was talking about the new auto manufacturer we had signed, that's a really interesting manifestation of a commerce network because you have multiple constituencies. You have the OEM that might be doing big national television buys and planning. You have the regional – I don't know what they call them there, they're like – they've grouped their regions and they consolidate, like, local market ad spend through those kind of retail agencies, if you will.

And then, you have the actual distributors themselves, where you go to buy your car, the dealership. And this is connecting all three of those groups together so that they can collaborate more effectively. And I think, like, I can see this working in healthcare. I can see this working in financial services. We have some financial services clients actually that already are moving down that path of financial services and retail. I mean, so many of the credit cards in our wallet are co-branded for a retailer.

So, I've read some of the research that says, hey, retail media networks isn't a large market. And that may be true. I don't agree with that. But that's not the market we're playing for. We think that the TAM here is so much bigger than just retail and packaged goods. It's literally any company that has data can collaborate with other companies that have good permission, authenticated data and generate better results.

Vasily Karasyov*Analyst, Cannonball Research LLC*

Q

Okay. Thank you. Thanks.

Operator: Your next question comes from the line of Nicholas Zangler with Stephens. Please go ahead.

Nicholas Zangler*Analyst, Stephens, Inc.*

Q

Hey, guys. Solid quarter here. I did want to take a deeper dive on the usage metric you provided. So, I think that was down 9% in the prior quarter, what you just released. If I were to kind of use that metric as an indicator of advertising demand, can you just talk about maybe how that performed in April and May? Or maybe just discuss how that number has progressed from January until now, just as a means to kind of gauge the ad environment. And whether you think that metric has actually likely troughed in this quarter as you think about maybe softer or negative trends into the next year, specifically on that metric.

Lauren Russi Dillard*Interim Chief Financial Officer, Senior Vice President, Finance and Investor Relations, LiveRamp Holdings, Inc.*

A

Yeah. I'm happy to take that, Nicholas. And I would start by just saying, while not perfectly linear, both Subscription usage and Data Marketplace directionally kind of track in line with the overall digital advertising environment. However, in Q4, usage was impacted by a pretty tough comp from the year-ago period. So, in terms of a barometer on overall digital advertising health, I'd probably point you to our Data Marketplace growth, especially in the quarter we just reported, as a better indicator.

So, for Data Marketplace, we saw growth decline in December and again in January. We saw very modest growth in February, and then growth stable, then pick up in March and again in April. So, we have seen trends there rebound a bit. However, for our Data Marketplace, some of that rebound was fairly concentrated with a few large media platforms who buy off our Marketplace.

As we think ahead to FY 2024, our guidance does assume Marketplace growth kind of moderates. And this is really our attempt to kind of be conservative given the lack of forward visibility here. And again, this is an area where we feel like we can do better if current trends hold.

Nicholas Zangler*Analyst, Stephens, Inc.*

Q

Got it. That's very helpful. And then, I just wanted to circle back to payers, if you don't mind. We've been exploring it and it just seems that it's very heavily reliant on the Safe Haven clean room solution. And obviously, there are

other clean rooms involved in the mix. But I just – as far as like, fundamentally, how it works, if payers have access through Google's DSP, can you just talk about then what happens, like how the clean room selection is done by an advertiser, thinking through that there are multiple providers, including yourself? And also, then, does a Google DSP user have to be a LiveRamp subscriber currently in order to utilize that PAIR of solution? So, just any more details on the fundamentals on how that's executed and if you're willing, just how to think about how that relationship is monetized?

Scott E. Howe

Director & Chief Executive Officer, LiveRamp Holdings, Inc.

A

Yeah. So, Google is basically outsourced, and I think it's the right decision on their part, this kind of matching functionality. And it requires authentication on the advertiser side. So the advertiser is collecting permissions, perhaps in their loyalty program on their website and you sign up for an e-mail. The publisher is doing the same. Perhaps when you go sign in to get walled garden content, and then the match happens in the middle.

And having it actually be a neutral party – and LiveRamp is one of several that are participating in the alpha, we're the biggest – I think eliminates any potential concern about security or data privacy or bias or anything like that because we can make the match, anonymize it, encrypt it, and ensure its secure. To participate in this, if someone wanted to use RampID, yes, they have to be a LiveRamp subscription client.

So potentially, there's some upside in future client wins for us as this scales. But again, it's so early. I mean, this is in alpha testing right now and full-scale deployment isn't scheduled by Google until next calendar year. So I think there is probably a lot of learnings that they are going to have, a lot of communication that they will have as they have those learnings about how the program will scale and how we'll, ultimately, deploy. But the one thing we do know is the big migration is planned for calendar 2024.

Nicholas Zangler

Analyst, Stephens, Inc.

Q

Got it. Understood. And then, just final quick one for me, if you don't mind. I'm thinking about political ad spend. Is there a way for Ramp to benefit from this as we think about 2023 and especially 2024 calendar? I mean, it would seem that the solution would be very useful as these political ad campaigns start to run through, but just thoughts there? Thank you.

Scott E. Howe

Director & Chief Executive Officer, LiveRamp Holdings, Inc.

A

Sure. And it is something – I mean, we work with both parties. And particularly, in our Data Marketplace business, we typically do see a seasonal bump during an election cycle. It will be really interesting, depending on how things get ramped up. I know there was a big announcement today, whether some of the presidential election stuff, the cycle has pulled up a little bit. If it is, that helps us a lot. But obviously, we think that the real spend happens in calendar 2024 when Americans are making up their minds about who they are going to vote for.

Nicholas Zangler

Analyst, Stephens, Inc.

Q

Got it. Thank you so much.

Operator: We have time for one more question, and it comes from the line of Mark Zgutowicz with The Benchmark Company. Please go ahead.



Mark Zgutowicz

Analyst, The Benchmark Co. LLC

Thank you. Just a couple, real specific ones. I was hoping you might be able to share what Safe Haven ARR was in quarter? And Scott, in your comments about data collaboration outside CPG and retail, certainly an interesting topic to dig into a bit. But just curious, if you think about contribution outside CPG/retail over the next two years, would you care to sort of put a finer point on what you think that mix could look like in terms of ARR bookings or something? And then, last quick one is on RPO growth. I was hoping you might share what that growth looked like, ex your ICG renewal and the large auto, just to get a gauge on how that trajectory may look for the balance of the year? Thanks.



Lauren Russi Dillard

Interim Chief Financial Officer, Senior Vice President, Finance and Investor Relations, LiveRamp Holdings, Inc.

Certainly. And Mark, let me take the first one. I might pass it to Scott for the second, and can circle back to answer the third. So, in the quarter, we had a strong quarter, as Scott mentioned, upselling our customers to our data collaboration platform, which we've formally talked about as Safe Haven. In the quarter, Safe Haven-influenced ARR represented north of 30% of total ARR and was up nicely year-on-year, so up 30% year-on-year. That said, moving forward, we don't expect to formally disclose this metric, as we've really evolved our go-to-market and have integrated the Safe Haven, the data collaboration capabilities into our unified platform. So, moving forward, we would point you to overall ARR growth as the best indicator of forward growth for the business.



Scott E. Howe

Director & Chief Executive Officer, LiveRamp Holdings, Inc.

And in terms of commerce networks and the growth and the pacing of those, I don't know if we're the experts in terms of sizing all those things. I can tell you which I think are going to become larger, faster, and my bet would be that the next one that we really see take flight will be with publishers, television providers, in particular. It is very compatible with clean room solutions like PAIR. Publishers have, over the last couple of years, almost universally become much better at getting to authentication. And they are recognizing that they have some really valuable data that hasn't been effectively utilized. And so, they see an opportunity. They don't want to just share that data broadly; they want to control how that data is utilized, ensure that the right permissions are adhered to, and that no one is misappropriating their data and using it to train their own models.

So, I think particularly in the CTV space, there is a lot of interest in creating a very similar kind of media collaboration model to how we've seen the media networks develop. If you're a large CTV provider, you kind of think, hey, I am monetizing my inventory. That's yield. The data is just a second lever of potential yield for me. It might make my existing inventory more valuable or maybe I even monetize the data itself. That, to me, is number one.

And then, kind of two and three in no particular order, I would say, financial services. There is a healthy appetite for this. And then, the other is travel. The seeds in travel are already in place because airline miles are the currency of exchange across all of your travel partners. So those same consortiums that exist that have historically been built around miles increasingly will use data as the currency. I think that's probably a couple years to really play out and scale, but all three of those I see being very interesting markets.



Lauren Russi Dillard

Interim Chief Financial Officer, Senior Vice President, Finance and Investor Relations, LiveRamp Holdings, Inc.

And to circle back, Mark, to the RPO question. Looking at the sequential increase, the Q3 to Q4 increase in total RPO, I believe it was up roughly \$60 million to \$65 million and would size the IPG impact at roughly \$30 million to \$40 million of that sequential improvement. I'm not going to break out the size of the auto deal that Scott mentioned. But I will say, in addition to the auto win, we had several large multi-year, multimillion-dollar data collaboration deals that closed in Q4, which also benefited the improvement in RPO.

Mark Zgutowicz

Analyst, The Benchmark Co. LLC



Thank you. That's very helpful color. Appreciate it.

Operator: Thank you. With that, I will turn the call to Lauren Dillard for closing remarks.

Lauren Russi Dillard

Interim Chief Financial Officer, Senior Vice President, Finance and Investor Relations, LiveRamp Holdings, Inc.

Thank you. While Q4 was not a momentous quarter on the surface, we did deliver strong operating profit results while on the top line weathering a tough macro and sales execution challenges from earlier in the year. As we enter FY 2024, we're heads down and focused on the things we can improve and are seeing some very positive trends emerge that give us confidence in our ability to reaccelerate growth as we move through the year. And finally, we believe our FY 2024 guidance is appropriately conservative and achievable.

So, thanks again, everyone, for joining us today. We look forward to updating you in the quarters ahead. Thank you.

Operator: This concludes today's conference call. Thank you for joining. You may now disconnect your lines.

Disclaimer

The information herein is based on sources we believe to be reliable but is not guaranteed by us and does not purport to be a complete or error-free statement or summary of the available data. As such, we do not warrant, endorse or guarantee the completeness, accuracy, integrity, or timeliness of the information. You must evaluate, and bear all risks associated with, the use of any information provided hereunder, including any reliance on the accuracy, completeness, safety or usefulness of such information. This information is not intended to be used as the primary basis of investment decisions. It should not be construed as advice designed to meet the particular investment needs of any investor. This report is published solely for information purposes, and is not to be construed as financial or other advice or as an offer to sell or the solicitation of an offer to buy any security in any state where such an offer or solicitation would be illegal. Any information expressed herein on this date is subject to change without notice. Any opinions or assertions contained in this information do not represent the opinions or beliefs of FactSet CallStreet, LLC. FactSet CallStreet, LLC, or one or more of its employees, including the writer of this report, may have a position in any of the securities discussed herein.

THE INFORMATION PROVIDED TO YOU HEREUNDER IS PROVIDED "AS IS," AND TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, FactSet CallStreet, LLC AND ITS LICENSORS, BUSINESS ASSOCIATES AND SUPPLIERS DISCLAIM ALL WARRANTIES WITH RESPECT TO THE SAME, EXPRESS, IMPLIED AND STATUTORY, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, ACCURACY, COMPLETENESS, AND NON-INFRINGEMENT. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, NEITHER FACTSET CALLSTREET, LLC NOR ITS OFFICERS, MEMBERS, DIRECTORS, PARTNERS, AFFILIATES, BUSINESS ASSOCIATES, LICENSORS OR SUPPLIERS WILL BE LIABLE FOR ANY INDIRECT, INCIDENTAL, SPECIAL, CONSEQUENTIAL OR PUNITIVE DAMAGES, INCLUDING WITHOUT LIMITATION DAMAGES FOR LOST PROFITS OR REVENUES, GOODWILL, WORK STOPPAGE, SECURITY BREACHES, VIRUSES, COMPUTER FAILURE OR MALFUNCTION, USE, DATA OR OTHER INTANGIBLE LOSSES OR COMMERCIAL DAMAGES, EVEN IF ANY OF SUCH PARTIES IS ADVISED OF THE POSSIBILITY OF SUCH LOSSES, ARISING UNDER OR IN CONNECTION WITH THE INFORMATION PROVIDED HEREIN OR ANY OTHER SUBJECT MATTER HEREOF.

The contents and appearance of this report are Copyrighted FactSet CallStreet, LLC 2023 CallStreet and FactSet CallStreet, LLC are trademarks and service marks of FactSet CallStreet, LLC. All other trademarks mentioned are trademarks of their respective companies. All rights reserved.