

## **SNAP INC. Q3 2021 PREPARED REMARKS**

### **BETSY FRANK, SENIOR DIRECTOR, INVESTOR RELATIONS**

Thank you, and good afternoon, everyone. Welcome to Snap's Third Quarter 2021 Earnings Conference Call. With us today are Evan Spiegel, Chief Executive Officer and Co-Founder, Jeremi Gorman, Chief Business Officer, and Derek Andersen, Chief Financial Officer.

Please refer to our investor relations website at [investor.snap.com](http://investor.snap.com) to find today's press release, slides, a copy of our prepared remarks, and our updated investor presentation.

This conference call includes forward-looking statements which are based on our assumptions as of today. Actual results may differ materially from those expressed in these forward-looking statements, and we make no obligation to update our disclosures. For more information about factors that may cause actual results to differ materially from forward-looking statements, please refer to the press release we issued today, as well as risks described in our most recent Form 10-Q, particularly in the section titled Risk Factors.

Today's call will include both GAAP and non-GAAP measures. Reconciliations between the two can be found in today's press release. Please note that when we discuss all of our expense figures they will exclude stock-based compensation and related payroll taxes as well as depreciation and amortization and non-recurring charges. Please refer to our filings with the SEC to understand how we calculate any of the metrics discussed on today's call.

With that, I'd like to turn the call over to Evan.

### **EVAN SPIEGEL, CHIEF EXECUTIVE OFFICER AND CO-FOUNDER**

Thank you all for joining us. This quarter we celebrated Snap's 10-year anniversary, and as we reflect on the progress we've made over the past decade, we have never been more excited about our future. Bobby and I grew up with social media, and we wanted to build something different: a way for people to have fun and express themselves without the permanence and pressure of public likes and comments. We built a camera to make it easier for people to communicate with close friends and family and express themselves visually, and today we reach more than 500 million people, including more than 75 percent of 13 to 34 year-olds in the United States, Canada, France, the UK, Australia, and the Netherlands. We have innovated on top of our camera and built augmented reality, content, and mapping platforms that each reach hundreds of millions of people. We are now operating our advertising business at scale, providing us with the resources we need to invest in our long-term vision of computing overlaid on the world through our camera—and we are just getting started.

This quarter, we grew Daily Active Users to 306 million, marking our fourth consecutive quarter of more than 20 percent year-over-year growth. We grew sequentially in North America and Europe, which represent our largest monetization opportunities in the near and medium term, and we continue to build on our momentum in the Rest of World geographies, where we see massive long term potential. Our DAU in Rest of World represents just 5 percent of the overall Rest of World smartphone population, which is currently more than 2 billion people and growing.

Many of the mixed engagement trends we observed during the pandemic and that we discussed on our last earnings call have continued through the third quarter. On one hand, while total content viewership and time spent have grown year-over-year, user-generated Stories continue to see year-over-year declines in overall time spent. On the other hand, we are seeing quarter-over-quarter improvements in engagement with the Snap Map, Story posting, new friend connections, and bi-directional communication, and we are cautiously optimistic about the ongoing reductions in pandemic-related restrictions worldwide.

We grew our revenue 57 percent year-over-year to reach \$1,067 million, delivering adjusted EBITDA of \$174 million and \$52 million of free cash flow. While we are excited about the continuing growth of our business and improvement in our cost structure, we missed the lower end of our guidance by \$3 million due to a few key factors, including changes to advertising tracking on iOS and macroeconomic factors that have impacted our advertising partners.

Our advertising business was disrupted by changes to iOS ad tracking that were broadly rolled out by Apple in June and July. While we anticipated some degree of business disruption, the new Apple-provided measurement solution did not scale as we had expected, making it more difficult for our advertising partners to measure and manage their ad campaigns for iOS. We have remained very focused on driving ROI for our advertising partners, and we continue to see strong, consistent performance on our ad platform based on first-party data and conversion lift studies, and are working on building flexible first-party tooling and measurement solutions to serve the diverse needs of our advertising partners.

This impact was compounded by the ongoing macroeconomic effects of the global pandemic, with our advertising partners facing a variety of supply chain interruptions and labor shortages. This in turn reduces their short-term appetite to generate additional customer demand through advertising at a time when their businesses are already supply-constrained. The ongoing magnitude and duration of these global supply and labor disruptions are inherently unpredictable, and in the meantime we are focused on supporting our partners in this uncertain environment.

While it is difficult to predict the trajectory of these challenges, the growth of our audience, the adoption of our new products and platforms by our community, and the underlying efficacy of our

advertising products for performance advertisers gives us confidence in the future of our business and our ability to navigate this environment as we continue to invest in our long-term vision.

Augmented reality is one of our most exciting long-term opportunities because it is simultaneously very early in its technological development and already used by hundreds of millions of people. More than 200 million people engage with AR every day on Snapchat, across a variety of use cases including entertainment, fashion, education, and the arts. This quarter, we partnered with SignAll to introduce three AR Lenses teaching Snapchatters how to fingerspell in American Sign Language. We featured a number of community try-on Lenses to celebrate Fashion Week, and we partnered with Sotheby's to allow Snapchatters to experience Christo and Jeanne-Claude's artistic rendition of the Arc de Triomphe from anywhere in the world.

We are also doubling down on the early successes we have seen helping people try on clothing, beauty products, and accessories with augmented reality, and are working closely with partners like Ralph Lauren, MAC Cosmetics, and Zenni Optical to expand our AR shopping experiences on today's smartphones. In the longer term, we are investing in new ways people can interact with the physical world around them, including using our AR-enabled Spectacles. We are thrilled to see the unique experiences our creator community has developed for this new form factor as we iterate on our long-term hardware product roadmap.

Our content partners continue to find success on our platform, with 15 different partners each reaching over 50 million Snapchatters this quarter. Two of our new Snap Originals launched this quarter, "Meme Mom" and "Honestly Loren", and each reached over 10 million viewers. We are also introducing more locally-relevant content as our community grows worldwide. In France, we partnered with M6, our first major French broadcast partner for entertainment content, to bring 400 episodes of their TV shows to Snapchat. In MENA, we partnered with ITP Media Group to bring more than 200 Show episodes from some of the region's biggest and most influential creators.

We are very excited about the long-term potential of Spotlight, our newest platform designed to shine a light on the best Snaps created by our community. In recent months, we have focused on building the tools and infrastructure to help creators of all kinds thrive on Spotlight. We have re-engineered the Spotlight Incentive Program to reach more creators who are publishing a greater diversity of content in more markets. We are committed to making Spotlight a platform on which professional creators can grow an audience and build a business, and both Gifting and the Creator Marketplace for Spotlight are now live. We are extremely pleased to see daily Spotlight submissions more than double when compared to last quarter, and are encouraged by ongoing quarter-over-quarter growth in both Daily Active Users of Spotlight and daily time spent per user. We will continue to build Spotlight into a unique entertainment destination for our community and a rewarding creative outlet for people expressing themselves through our camera.

We are also continuing to innovate and improve our products for both our community and our partners. We launched the Places tray, which allows the 250 million Snapchatters that use the Snap Map each month to save their favorite locations and explore what places are popular among their friends. We expanded our Minis offerings to include our first co-watching experience with HBO Max, as well as a new Birthday Mini to provide reminders for friends' birthdays. Our new Run for Office Mini, which helps young people run for local office, encouraged more than two million Snapchatters to explore local election opportunities and more than 45,000 people have nominated a friend to run for office. Profiles now support next-generation 3D Bitmoji, letting people express themselves through a variety of options for backgrounds, poses, and facial expressions.

As we reflect on the past decade, we are fortunate to have grown our business in a favorable economic, regulatory, and geopolitical environment. We prioritized growing our business responsibly and sustainably, rather than scaling as fast as possible, and our commitment to privacy and empowering self expression through our camera led us to build our products in a way that we believe enables our future success over the long term. As we look to the future, these fundamental decisions, along with the scale we have already achieved in our business and operations, gives us confidence that we have the resilience to maintain our momentum through a changing macro environment.

Now I'll turn the call over to Jeremi to share more about our business.

#### **JEREMI GORMAN, CHIEF BUSINESS OFFICER**

Thanks, Evan. In Q3, we generated total revenue of \$1,067 million, an increase of 57 percent year-over-year, as we grappled with industry changes to the way advertising is targeted, optimized, and measured on iOS that created a more significant impact on our business than we had expected. Despite these challenges, we crossed \$1 billion in quarterly revenue for the first time and we remain focused on our long-term opportunity to support our community and advertising partners, which we believe will be driven by three key priorities. First, driving ROI through measurement, ranking, and optimization. Second, investing in our sales and marketing functions by continuing to train, hire, and build for scale. Third, building innovative ad experiences around video and augmented reality, with a focus on commerce. Additionally, we reach a valuable and hard-to-find audience, which continues to grow around the world. Together, we believe that over the long term, these factors will allow us to drive performance at scale for businesses around the world.

We are continuing to work through the ongoing changes to digital advertising driven by Apple's App Tracking Transparency framework, which was introduced as part of iOS 14.5. We saw meaningful adoption in June and July, when Apple pushed all of its users to update to the new version of iOS. Broadly speaking, these changes have upended many of the industry norms and advertiser behaviors that were built on IDFA, Apple's unique device identifier for advertising, over the past decade, which now require a double opt-in by users in order to access directly.

As part of these changes, Apple rolled out SKAdNetwork, or SKAN, as a proprietary solution to allow app-based advertisers to continue measuring their advertising on iOS. The initial results we observed using SKAN were generally aligned with prior industry standard solutions, and we were among the first platforms to lean into this solution and push for widespread industry adoption. However, over time, we saw SKAN measurement results diverge meaningfully from the results we observed on other first and third-party measurement solutions, making SKAN unreliable as a standalone measurement solution.

Furthermore, as our advertising partners have explored and tested SKAN's solutions, they have surfaced a variety of concerns about its limitations. Every advertiser has their own unique, fine-tuned perspective on the optimal parameters to measure ROI for their business, but SKAN requires them to use Apple's fixed definitions of advertiser success. For example, advertisers are no longer able to understand the impact of their unique campaigns based on things like the time between viewing an ad and taking an action or the time spent viewing an ad. Additionally, real-time campaign and creative management is hindered by extended reporting delays, and advertisers are unable to target advertising based on whether or not people have already installed their app.

As a result, we have accelerated our focus on developing additional first party privacy-safe solutions to help our advertising partners measure their campaigns effectively. Our primary solution is Advanced Conversions, which works seamlessly with our mobile measurement partners and uses aggregated, privacy-safe methodologies to help advertisers understand the impact of Snapchat in their media mix. This solution is now launched for all eligible advertisers, and we are encouraged by the early adoption we're seeing from apps: even with a basic feature set, we have approximately 50 percent of app advertisers opting in via their media measurement partner or direct integrations. We are excited to invest in both third-party and first-party solutions to provide a richer set of privacy-safe tools to our partners to help them measure and optimize their advertising.

We otherwise continue to see strong, sustained performance in our app advertising platform, as measured by both first-party engagement data and incremental lift studies, and believe the long-term shift towards privacy-safe solutions will be a net benefit to our community and our business. We are working closely with our advertising partners to help them grow their businesses with our large, engaged audience. This work will not only address the near-term disruptions driven by ATT, but will also help our partners adapt for the long-term, privacy-oriented future.

Over the last couple of years, our direct response business has grown at a faster rate than our brand business. This is something of which we are incredibly proud, and continue to feel is the right strategy for the long-term. Proving performance and delivering ROI are our top priorities, and we have made significant progress over the past several years. As we have mentioned for the past few quarters, DR has grown to comprise over 50 percent of our business. While this has been a historic strength, given the recent ATT changes, coupled with Snapchat's existence as a mobile-only platform, our strength in

DR has become a more significant headwind in the current environment; however, we still believe that in time, every advertiser will be a performance advertiser, and despite the recent shake up in the ecosystem, driving DR performance is the right strategy over the long term.

Separate from these iOS-related issues, we have heard from advertising partners across a wide variety of industries and geographies that they are facing headwinds in their business related to disruptions in global supply chains as well as labor shortages and increasing costs. In turn, we expect this to impact advertising demand in Q4 in particular as, in many cases, their businesses do not have the inventory or operational capacity to support incremental demand. We expect that some of these clients may opt to slow their marketing spend given the diminished need to drive incremental demand at a time when their supply chains are not able to operate at peak capacity.

We continue to invest in our sales teams and marketing initiatives in order to support our advertising partners and achieve our long term revenue and ARPU goals. For example, this quarter our marketing team launched the 'Open Your Snapchat' campaign, which invites both customers and advertisers to fully dive into augmented reality, unlocking hundreds of custom experiences localized to several different markets across the globe. The campaign highlights many of our ecommerce advertiser and B2B relationships—this week we rolled out a new ad experience lining the walkway of the Westfield Bridge in London, which features Lenses with brands including American Eagle, Ralph Lauren, and the Jordan Brand. While still early days, we have already seen positive signs of the campaign's success, including lifts in consideration and trust among our 25 to 34 year-old audience. The team also launched Snapchat Trends in the quarter, a self-service tool which allows our advertising partners to discover and explore trends across Snapchat, so they can find what topics perform well on Snapchat and better engage with our community.

We continue to invest heavily in professional content and video advertising to support our community and advertising partners. For example, we partnered with Hollister to seamlessly integrate custom ads within our new Snap Original, Lago Vista. Each episode included three Commercials featuring one of the series' cast members sporting Hollister gear, and the third Commercial introduced a new custom Hollister-branded augmented reality Lens, which included prompts that Snapchatters could tap to visit the Hollister website. The entire ad experience focused on creating cohesive branding within our Snap Original content, which led to strong view rates and share rates.

We believe the camera and augmented reality represents our most exciting long term revenue opportunity, particularly as brands start to build always-on AR strategies for their business. Augmented reality advertising is a fully immersive experience that is delivering a return on investment for advertisers that is measurable and repeatable, which is encouraging more and more businesses to invest in AR. For example, Ulta Beauty leveraged our GBB Pixel purchase optimization for AR to bring unique makeup try-on experiences to Snapchatters, which drove over a 4.5x higher return on ad spend

compared to its campaign optimized for impressions. The success of the try-on Lens ultimately encouraged Ulta Beauty to include AR Lenses within its long-term business strategy.

We have continued to roll out a number of tools and capabilities to help empower AR commerce on Snapchat. Not only can our AR try-on technology drive higher return on ad spend for businesses, but it can also deliver a huge uplift for brands because Snapchatters can visualize what they look like wearing different products. For example, Samsung Watch 3 adopted our AR try-on Lens in the UK to drive product awareness for its latest wearable technology. The campaign delivered impressive brand lift measurement results including a 23pt lift in product awareness driven by those exposed to the Lens.

Now, businesses of all sizes are beginning to invest in their own Public Profile, which gives them a free, permanent home on Snapchat where they can showcase compelling AR experiences and share shoppable products directly within the app. The Department of Culture and Tourism - Abu Dhabi launched its first official Public Profile in Q3, which aims to give potential visitors a chance to discover what the UAE's capital has to offer. The new profile has already driven incremental engagement with Snapchatters: the Stories format highlights the destination's many offerings, and the AR experiences are an immersive way to explore Abu Dhabi virtually.

One of our top priorities for AR is reducing the barrier to creation and helping brands understand the importance of AR and the value it can drive. One of the ways in which we are improving this is through our recent acquisition of Vertebrae, a platform that enables brands and retailers to develop 3D AR assets. Vertebrae's team and technology will further our AR apparel and 3D asset roadmap, by providing the backend platform to create, manage and deploy AR assets. We are offering 3D asset creation as a service to help businesses create AR content at scale and drive business results. This platform will also make it even easier for brands to activate AR shopping experiences on Snapchat. Additionally, we announced a new partnership that will give WPP and its clients more access to Snap's AR technology and resources, including classes on how to use AR, creative production and campaign measurement.

We also just announced the launch of our new global creative studio for branded AR called Arcadia. Powered by the team of world-class experts that pioneered mobile AR advertising, Arcadia will develop new technology and deliver the most innovative, impactful and effective AR experiences to brand and agency partners. Arcadia will be platform agnostic and develop experiences that can live across different platforms, including the web and app based AR environments.

Lastly, when brands use a portfolio approach of combining Sponsored AR Lenses with Snap Ads, they result in higher ROI and lower costs per outcome. For example, Lionsgate's Spiral campaign utilized Snap Ads, Story Ads, and a Lens to generate double-digit lifts in brand awareness and ad awareness and a 9pt lift in Watch Intent. When Snapchatters were exposed to multiple products, brand awareness

and watch intent increased by 2x and 3x respectively, ultimately reinforcing the value of leveraging our different ad formats together to drive performance and ROI.

In summary, we are working very closely with our advertising partners to build and adapt for the future. While there will be near term monetization challenges related to our direct response business and the macroeconomic environment, we ultimately believe that the best way to retain and build relationships with advertisers is to continuously deliver measurable ROI. We will continue to invest for the long-term in making product and marketplace improvements to help advertisers scale, build focused relationships with brands and agencies across verticals, and improve our direct response products and measurement solutions for performance-centric businesses. Based on the size of our audience, their levels of engagement across our service, and our overall opportunity in the growing digital advertising market, we are well-positioned to play an important role in driving results for businesses across the world. And with that, I'd like to turn the call over to Derek.

#### **DEREK ANDERSEN, CHIEF FINANCIAL OFFICER**

Thanks Jeremi. Our Q3 financial results reflect our priorities of growing our community, making focused investments in the future of our business, and scaling our operations efficiently in order to drive towards profitability and positive free cash flow.

As Evan mentioned earlier, our community grew to 306 million Daily Active Users in Q3, an increase of 57 million or 23 percent year-over-year. Q3 marks our 4th consecutive quarter of year-over-year growth in excess of 20%, and is tied with the prior quarter for the highest rate of growth for our community in more than 4 years. In North America, DAU grew by 6 million or 7 percent year-over-year to reach 96 million. In Europe, DAU grew by 8 million or 11 percent year-over-year to reach 80 million. In Rest of World, DAU grew by 43 million or 49 percent year-over-year to reach 130 million as we continue to execute against the international growth playbook we laid out at our investor day earlier this year, including investments in local language support, local content, local marketing partnerships and support for local creator communities.

Total revenue for Q3 was \$1,067 million, an increase of 57 percent year-over-year. This was \$3 million below our guidance range entering the quarter, which primarily reflects headwinds associated with iOS platform policy changes. Direct response advertising has comprised the majority of our business for some time now and has also been growing at relatively higher rates in recent quarters. Due to the impact of changes in the iOS ecosystem that affect optimization and measurement of direct response advertising objectives, the revenue from this portion of our business was approximately flat quarter-over-quarter. Our brand focused advertising business was the primary driver of sequential growth in Q3 and remained healthiest in North America during the quarter.

In North America, our revenue grew 60 percent year-over-year in Q3, while ARPU grew 49 percent year-over-year as we continue to benefit from the significant investments we made in our sales teams and sales support in the prior year. In Europe, revenue grew 49 percent year-over-year in Q3, while ARPU grew 34 percent year-over-year. In Rest of World, revenue grew 53 percent year-over-year in Q3, while ARPU grew 3 percent year-over-year. As we've indicated in the past, we are continuing to accelerate our investments in sales and sales support beyond North America in order to capture our global ARPU opportunity faster in the years ahead. Given the rapid growth of our community in Rest of World, and the relatively early stage of our investments in sales and sales support in this region, Rest of World ARPU is best considered as an output metric at this stage.

Average eCPM increased 62 percent year-over-year in Q3. Rising eCPM relative to the prior year reflects the year-over-year rise in overall demand, a mix shift towards relatively higher eCPM products, as well as a mix shift towards relatively higher eCPM regions such as North America. In addition, we have observed sequential and year-over-year increases in the cost per action for our goal based bidding products, which we attribute to the loss of signals that our advertising partners have previously relied on to measure the impact of their campaigns. Adoption of our new measurement solutions, such as Advanced Conversions, is ongoing but will take time to be fully adopted. In addition, the ecosystem for measuring advertising returns is continuing to shift, with more changes anticipated as part of iOS 15 that are expected to further reduce the availability of certain signals that are currently used broadly as tools for optimization and measurement. Continuing to evolve and adapt our measurement solutions amid the rapidly shifting operating environment is a top priority as we seek to deliver attractive returns on advertising spend for our advertising partners over the long term. The ongoing growth of our community, and strong engagement in areas of our application that we have not yet begun to monetize, provide confidence in the value of our inventory and platform over the long term as we continue to navigate these changes.

Gross margins were 60 percent in Q3, an increase of approximately 2 percentage points year-over-year and 4 percentage points sequentially, which brings us to the 60 percent medium term goal we noted at our investor day much sooner than anticipated. Gross margins may occasionally be volatile as we make investments in the long term growth of our business, as demonstrated by our investments in Spotlight, but we continue to deliver against our goal of driving down our underlying infrastructure unit costs over time to achieve long term margin expansion. Infrastructure cost per DAU was \$0.66 in Q3, down from \$0.70 in the prior year, but up from our record low as a public company of \$0.62 in the prior quarter. The sequential rise in this metric reflects investments in machine learning to support our direct response advertising business and Spotlight content optimization, as well as investments in support of our overall community growth.

On the content side we continued to invest in Spotlight, and this contributed to year-over-year growth in cost of revenue, but the level of investment declined sequentially reflecting a full quarter of the new

structure for this program to promote more content diversity across categories and regions. We continue to be highly encouraged by the early returns from our investments in Spotlight with daily Spotlight submissions more than doubling compared to the prior quarter, and ongoing quarter-over-quarter growth in both Daily Active Users of Spotlight and daily time spent per user. While it is still very early for this new platform, we are excited about the potential for Spotlight to further expand our monetization opportunity in the future. We are particularly pleased that we have been able to continue to invest in Spotlight and Discover while expanding our gross margins year-over-year, which reflects our overall approach of scaling our operations efficiently, while making investments in the future of our business.

Operating expenses were \$464 million in Q3, up 37 percent year-over-year. As expected, our rate of hiring stepped up in Q3. Total employee related costs were up 31 percent year-over-year driven by a 40 percent increase in full time headcount. This reflects ongoing investments in our team as well as the integration of acquisitions made over the past year, which contributed approximately 10 percentage points of the year-over-year growth in full time headcount. In addition, we increased our investments in marketing both sequentially and year-over-year with the launch of the "Open Your Snapchat" campaign in Q3. Lastly, certain costs that were significantly diminished due to the pandemic related restrictions in the prior year, including travel and event related costs, are gradually returning to our cost structure and contributed in part to the year-over-year growth rate of operating expenses.

Adjusted EBITDA was \$174 million in Q3, an improvement of \$118 million year-over-year as we continued to grow our topline rapidly while scaling our cost structure efficiently. We delivered adjusted EBITDA leverage of 30 percent in Q3 as we continue to invest in the future of our business, while making progress towards sustained profitability and positive free cash flow.

Net income was negative \$72 million in Q3, an improvement of \$128 million over the prior year, which reflects the flow through of the \$118 million improvement in adjusted EBITDA as well as \$122 million higher gains on investments in the quarter. This was partially offset by \$120 million higher stock based compensation. While headcount growth is the largest driver of this expense, accounting for more than 60 percent of the year-over-year increase, the impact of long-term retention associated with several acquisitions completed in the last year, and the impact of higher payroll related taxes due to our higher stock price were also significant drivers of the year-over-year increase.

While we have continued to grow our team, and leverage stock based compensation strategically to foster an ownership culture and drive long-term retention, we have remained focused on managing these programs responsibly. Total fully diluted shares outstanding grew 4.6 percent year-over-year in Q3. A significant portion of this year-over-year growth was driven by \$1.1 billion of early conversions of our outstanding convertible notes that were completed in Q2 and Q3 of 2021. Excluding dilution related to convertible notes, the rate of growth in fully diluted shares outstanding was just 1.3 percent year-

over-year, down from 1.7 percent in the prior quarter, and well below the 3 percent estimate we shared during our recent investor day that was noted to be exclusive of any dilution related to convertible notes.

Free cash flow for Q3 was positive \$52 million, or a \$121 million improvement versus the prior year, driven primarily by the improvement in adjusted EBITDA noted earlier. We ended the quarter with \$3.5 billion in cash and marketable securities, up from \$2.7 billion in the prior year, as the proceeds of convertible notes issued over the past year more than offset the investments we have made to grow the business over the same period. As a result of the early conversions of our convertible notes mentioned earlier, we have been able to build our cash position to fund long term investments while maintaining a responsible level of overall debt at \$2.3 billion in Q3, which is approximately flat year-over-year on an apples-to-apples basis after adjusting for the impact of adopting the new accounting standard for convertible notes. This reflects our approach of managing our balance sheet conservatively and responsibly to support the long term growth of our business.

Q3 marks our second quarter of positive free cash flow and we are also free cash flow positive on a year-to-date basis, which marks an important milestone for our company as we transition towards self funding our investments in the future of our business. The progress we have made in expanding our gross margins and balancing our investments in operating costs as we scale our business have enabled us to drive 34 percent of incremental revenue to the adjusted EBITDA line over the trailing twelve months, which demonstrates the potential for our business to deliver substantial free cash flow generation as we scale our topline over time.

As we look forward to Q4, we face a variety of challenges in the operating environment including the iOS platform changes, as well as macro uncertainty driven by supply chain disruption and labor shortages. The fact that these challenges are largely exogenous makes the provision of guidance particularly challenging and complex.

We expect that the measurement and optimization foundations of the digital advertising economy will continue to experience significant changes in the months ahead, including additional disruptions we expect related to the adoption of iOS 15. We are focused on helping our partners navigate these changes, but we still expect these headwinds to continue to impact our business throughout Q4 as the adoption of new measurement solutions will take time. It is still not clear what the longer term impact of the iOS platform changes may be, and this may not be clear until at least several months or more after the ecosystem stabilizes and advertisers are able to fully implement the new solutions we are developing.

In addition, we are hearing from advertising partners across a wide variety of industries that they are facing disruptions in their supply chains as well as labor shortages. Unfortunately, these changes are occurring during a season when our advertising partners would normally expect their supply chains to be operating at peak capacity, and at a time when we would otherwise expect peak advertising demand to drive peak contestation, and therefore peak pricing, in our auction. While it is difficult to predict the duration and magnitude of these macroeconomic factors on the businesses of our partners, we have assumed that these headwinds will persist throughout Q4. When combined with the measurement related headwinds we are seeing in our direct response business, we expect a compounding impact on the level of contestation and pricing in our auction based ecosystem relative to what we would otherwise expect during the second half of Q4 in particular.

We currently estimate that DAU will be 316 million to 318 million in Q4 implying year-over-year growth of 19 to 20 percent. On the monetization side, we currently estimate Q4 revenue will be between \$1,165 million and \$1,205 million, implying year-over-year growth of between 28 and 32 percent in Q4. On the expense side in Q4, we intend to continue to invest in our teams and products to support the long term growth of our business in order to build on the momentum we have established with our community and our partners. Our estimates for Q4 adjusted EBITDA reflect our revenue guidance and our expected level of investment resulting in a range of \$135 million to \$175 million for Q4. Thank you for joining our call today and we will now take your questions.