

**Meta Platforms, Inc. (META)**  
**Third Quarter 2022 Results Conference Call**  
**October 26<sup>th</sup>, 2022**

**Deborah Crawford, VP, Investor Relations**

Thank you. Good afternoon and welcome to Meta Platforms third quarter 2022 earnings conference call. Joining me today to discuss our results are Mark Zuckerberg, CEO and Dave Wehner, CFO. Susan Li, VP of Finance and our incoming CFO and Marne Levine, Chief Business Officer are also on the call and will join Mark and Dave for the Q&A portion.

Before we get started, I would like to take this opportunity to remind you that our remarks today will include forward-looking statements. Actual results may differ materially from those contemplated by these forward-looking statements.

Factors that could cause these results to differ materially are set forth in today's press release, and in our quarterly report on form 10-Q filed with the SEC. Any forward-looking statements that we make on this call are based on assumptions as of today and we undertake no obligation to update these statements as a result of new information or future events.

During this call we may present both GAAP and non-GAAP financial measures. A reconciliation of GAAP to non-GAAP measures is included in today's earnings press release. The press release and an accompanying investor presentation are available on our website at [investor.fb.com](http://investor.fb.com).

And now, I'd like to turn the call over to Mark.

**Mark Zuckerberg, CEO**

Hey everyone, thanks for joining today.

Our community continued to grow this quarter. We now reach more than 3.7 billion people monthly across our family of apps.

And while we continue to navigate some challenging dynamics -- a volatile macroeconomy, increasing competition, ads signal loss, and growing costs from our long-term investments -- I have to say that our product trends look better from what I see than some of the commentary I've seen suggests.

There has been a bunch of speculation about engagement on our apps and what we're seeing is more positive. On Facebook specifically, the number of people using the service each day is the highest it's ever been -- nearly 2 billion -- and engagement trends are strong. Instagram has more than 2 billion monthly actives. WhatsApp has more than 2 billion daily actives, also with the exciting trend that North America is now our fastest growing region. Across the family, some apps may be saturated in some countries or some demographics, but overall our apps continue to grow from a large base. We're also seeing engagement grow -- especially strong growth in Reels -- and I'll share more details around that when I discuss our product priorities shortly.

In terms of our business, total revenue grew slightly this quarter on a constant currency basis. We're still behind where I think we should be, but we believe that we will return to healthier revenue growth

trends next year. That said, it's not clear that the economy has stabilized yet so we're planning our budget somewhat more conservatively.

In 2023, we're going to focus our investments on a small number of high priority growth areas. So that means some teams will grow meaningfully, but most other teams will stay flat or shrink over the next year. In aggregate, we expect to end 2023 as either roughly the same size, or even a slightly smaller organization than we are today.

Three of the primary areas we're going to focus on are our AI discovery engine that's powering Reels and other recommendation experiences, our ads and business messaging platforms, and our future vision for the metaverse. The internal indications I've seen suggest we're doing leading work and we're on the right track with these investments, so I think we should keep investing heavily in these areas.

As I've shared before, our goal is to grow Family of Apps operating income, such that even with our AI infrastructure and Reality Labs investments, we can still meaningfully grow our overall company operating income in the long run. Our current surge in capex is largely due to building out our AI infrastructure and we would expect capex to come down as a percent of revenue over the long term. We expect Reality Labs expenses will increase meaningfully again in 2023, with the biggest drivers of that being the launch of the next generation of our consumer Quest headset and hiring that's been done in 2022 but for which we'll be paying the first full year of salaries next year. More broadly, beyond 2023, we expect to pace Reality Labs investments to ensure that we can achieve our goal of growing overall company operating income. Our capital allocation philosophy over the long term is to allocate a portion of the profits generated from the Family of Apps towards these future focused areas while enabling greater return of capital to shareholders.

Now, I'd like to share some updates on the progress that we're seeing in these product areas.

Our AI discovery engine is playing an increasingly important role across our products -- especially as advances enable us to recommend more interesting content from across our networks in feeds that used to be primarily driven just by the people and accounts you follow.

This of course includes Reels, which continues to grow quickly across our apps -- both in production and consumption. There are now more than 140 billion Reels plays across Facebook and Instagram each day. That's a 50% increase from six months ago. Reels is incremental to time spent on our apps. The trends look good here, and we believe that we're gaining time spent share on competitors like TikTok.

Over time, I expect a few things to set our products apart here. First is that our discovery engine work allows us to recommend all types of content beyond Reels as well, including photos, text, links, communities, short and long-form videos, and more. Second is that we can mix this content alongside posts from your family and friends, which can't be generated by AI alone. Third, as more social interactions move to messaging, we're developing a flywheel between discovery and messaging that are going to make these apps stronger. On Instagram alone, people already reshare Reels 1 billion times a day through DMs.

Moving to monetization, I've discussed in the past how the growth of short-form video creates near-term challenges since Reels doesn't monetize at the rate of feed or stories yet. That means as Reels grows, we're displacing revenue from higher-monetizing surfaces. I think this is clearly the right thing to do so that Reels can grow with the demand we're seeing, but closing this gap is also a high priority. Even

with the progress we've made, we're still choosing to take a more than \$500 million quarterly revenue headwind with this shift. But we expect to get to a more neutral place over the next 12-18 months. I mentioned last quarter that Instagram Reels had crossed \$1 billion annual revenue run rate. We continue scaling monetization across both Instagram and Facebook, and the combined run rate across these apps is now \$3 billion.

Beyond Reels, messaging is another major monetization opportunity. Billions of people and millions of businesses use WhatsApp and Messenger every day, and we're confident we can connect them in ways that create valuable experiences.

We started with Click-to-Messaging ads, which let businesses run ads on Facebook and Instagram that start a thread on Messenger, WhatsApp or Instagram Direct so they can communicate with customers directly. This is one of our fastest growing ads products, with a \$9 billion annual run rate. This revenue is mostly on Click-to-Messenger today since we started there first, but Click-to-WhatsApp just passed a \$1.5 billion run rate, growing more than 80% year-over-year.

Paid messaging is another opportunity that we're starting to tap into, and it continues to grow quickly but from a smaller base. We're putting the foundation in place now to scale this with key partnerships like Salesforce, which lets all businesses on their platform use WhatsApp as the main messaging service to answer customer questions, send updates, and sell directly in chat. We also launched JioMart on WhatsApp in India and it's our first end-to-end shopping experience that shows the potential for chat-based commerce through messaging.

Between Click-to-Messaging and paid messaging, I'm confident that this is going to be a big opportunity.

The last area that I want to discuss today is the metaverse.

We just had our Connect conference and announced Quest Pro, which we just started shipping. It's our new high-end VR headset that delivers high-resolution mixed reality so you can blend virtual objects into the physical environment around you. It's pretty amazing when you see it, and it's going to enable all kinds of new experiences in socializing, gaming, fitness, and work. I'm really looking forward to seeing what people build with this new capability.

Work in the metaverse is a big theme for Quest Pro. There are 200 million people who get new PCs every year, mostly for work. Our goal for the Quest Pro line over the next several years is to enable more and more of these people to get their work done in virtual and mixed reality, eventually even better than they could on PCs.

To deliver a great work and productivity experience, I'm excited about the partnerships we announced with Microsoft bringing their suite of productivity and enterprise management services to Quest, Adobe and Autodesk bringing their creative tools, Zoom bringing their communication platform, Accenture building solutions for enterprises, and more.

There's still a long road ahead to build the next computing platform, but we are clearly doing leading work here. This is a massive undertaking and it's often going to take a few versions of each product before they become mainstream. But I think our work is going to be of historic importance and create

the foundation for an entirely new way that we will interact with each other and blend technology into our lives, as well as a foundation for the long term of our business.

Between the AI discovery engine, our ads and business messaging platforms, and our future vision for the metaverse, those are three of the areas that we're very focused on. I believe the tougher prioritization, discipline, and efficiency that we're driving across the organization will help us navigate the current environment and emerge an even stronger company. As always, I'm grateful to everyone at Meta for your hard work, and to all of you for being on this journey with us.

With that, I'll turn it over to Dave.

**Dave Wehner, CFO**

Thanks Mark and good afternoon everyone.

Let's begin with our consolidated results. All comparisons are on a year-over-year basis unless otherwise noted.

Q3 total revenue was \$27.7 billion, down 4% or up 2% on a constant currency basis. Had foreign exchange rates remained constant with Q3 of last year, total revenue would have been approximately \$1.8 billion higher.

Q3 total expenses were \$22.1 billion, up 19% compared to last year. This includes a \$413 million impairment of certain operating leases as part of our ongoing work to align our office facilities footprint with our anticipated operating needs. In terms of the specific line items:

Cost of revenue decreased 1%, as a reduction in Reality Labs hardware costs was offset by growth in infrastructure and content-related expenses.

R&D increased 45%, mainly driven by hiring within our Family of Apps and Reality Labs segments, as well as Reality Labs technology development costs.

Lastly, Marketing & Sales and G&A increased 6% and 15% respectively, mainly driven by headcount-related costs.

Our pace of hiring slowed in the third quarter, consistent with our previously-stated plans. We added 3,700 net new hires in Q3, down from our Q2 net additions of 5,700 despite Q3 typically being a seasonally stronger hiring period. We expect hiring to slow dramatically going forward and to hold headcount roughly flat next year relative to current levels, which I will cover in my outlook section.

Third quarter operating income was \$5.7 billion, representing a 20% operating margin.

Our tax rate was 21%.

Net income was \$4.4 billion or \$1.64 per share.

Capital expenditures, including principal payments on finance leases, were \$9.5 billion, driven by investments in servers, data centers, and network infrastructure.

Free cash flow was \$173 million. We repurchased \$6.5 billion of our Class A common stock in the third quarter and completed an inaugural debt offering of \$10 billion. We ended the quarter with \$41.8 billion in cash and marketable securities.

Moving now to our segment results.

I'll begin with our Family of Apps segment.

Our community across the Family of Apps continues to grow. We estimate that approximately 2.9 billion people used at least one of our Family of Apps on a daily basis in September, and that approximately 3.7 billion people used at least one on a monthly basis.

Facebook continues to grow globally and engagement remains strong. Facebook daily active users were 1.98 billion, up 3% or 54 million compared to last year. DAUs represented approximately 67% of the 2.96 billion monthly active users in September. MAUs grew 48 million or 2% compared to last year.

Q3 Total Family of Apps revenue was \$27.4 billion, down 4%.

Q3 Family of Apps ad revenue was \$27.2 billion, down 4% but up 3% on a constant currency basis. Consistent with our expectations, the headwind to year-over-year growth from Apple's ATT changes diminished in Q3 as we lapped the first full quarter post the launch of iOS14.5. However, this was offset by weak advertising demand, which we believe continues to be impacted by the uncertain and volatile macroeconomic landscape. As a result, our Q3 constant currency growth rate was in-line with our Q2 rate.

The healthcare and travel verticals were the largest positive contributors to growth in Q3. However, this was offset by continued softness in other verticals, including online commerce, gaming, financial services and CPG. On an advertiser size basis, revenue growth from large advertisers remains challenged while we've seen more resilience amongst smaller advertisers.

Foreign currency was a significant headwind to advertising revenue growth in all international regions. On a user geography basis, year-over-year ad revenue growth was strongest in Asia-Pacific and Rest of World at 6% and 3%, respectively, with both regions continuing to benefit meaningfully from strong growth in click-to-messaging ads. North America and Europe declined 3% and 16%, respectively.

In Q3, the total number of ad impressions served across our services increased 17% and the average price per ad decreased 18%.

Impression growth was driven by Asia-Pacific and Rest of World. The year-over-year decline in pricing was primarily driven by strong impression growth, especially from lower monetizing surfaces and regions, foreign currency depreciation and lower advertiser demand.

Family of Apps other revenue was \$192 million, up 9%, driven by strong business messaging growth from our WhatsApp Business Platform partially offset by a decline in other line items.

We continue to direct the majority of our investments toward the development and operation of our Family of Apps. In Q3, Family of Apps expenses were \$18.1 billion, representing 82% of our overall

expenses. FoA expenses grew 18% driven mostly by employee-related costs, infrastructure-related costs, and the impairment of certain operating leases for office facilities that we plan to exit.

Family of Apps operating income was \$9.3 billion, representing a 34% operating margin.

Within our Reality Labs segment, Q3 revenue was \$285 million, down 49% due to lower Quest 2 sales.

Reality Labs expenses were \$4.0 billion, up 24% due primarily to employee-related costs and technology development expenses.

Reality Labs operating loss was \$3.7 billion.

Turning now to the outlook.

We expect fourth quarter 2022 total revenue to be in the range of \$30-32.5 billion. Our guidance assumes foreign currency will be an approximately 7% headwind to year-over-year total revenue growth in the fourth quarter, based on current exchange rates.

Before turning to the expense outlook, I wanted to provide some context on the approach we are taking towards setting our 2023 budget. We are making significant changes across the board to operate more efficiently. We are holding some teams flat in terms of headcount, shrinking others and investing headcount growth only in our highest priorities. As a result, we expect headcount at the end of 2023 will be approximately in-line with third quarter 2022 levels.

We have increased scrutiny on all areas of operating expenses. However, these moves follow a substantial investment cycle so they will take time to play out in terms of our overall expense trajectory. Some steps, like the ongoing rationalization of our office footprint, will lead to incremental costs in the near term. This should set us up well for future years, when we expect to return to higher rates of revenue growth.

Turning now to the specific expense outlook for 2022 and 2023.

We expect 2022 total expenses to be in the range of \$85-87 billion, updated from our prior outlook of \$85-88 billion. This includes an estimated \$900 million in additional charges related to consolidating our office facilities footprint that we expect to record in the fourth quarter of 2022.

We anticipate our full-year 2023 total expenses will be in the range of \$96-101 billion. This includes an estimated \$2 billion in charges related to consolidating our office facilities footprint.

We expect the slight majority of our 2023 expense dollar growth to be driven by operating expenses, with the remaining growth coming from cost of revenue. We expect the percentage growth rate of 2023 operating expenses to decelerate meaningfully as we curtail non-headcount related expense growth and keep 2023 headcount roughly flat with current levels. Conversely, our growth in cost of revenue is expected to accelerate, driven by infrastructure-related expenses and, to a lesser extent, Reality Labs hardware costs driven by the launch of our next generation of our consumer Quest headset later next year.

Reality Labs expenses are included in our total expense guidance. We do anticipate that Reality Labs operating losses in 2023 will grow significantly year-over-year. Beyond 2023, we expect to pace Reality Labs investments such that we can achieve our goal of growing overall company operating income in the long run.

Before turning to our capex outlook, I'd like to provide some context on our infrastructure investment approach. We are currently going through an investment cycle, which is being primarily driven by two large areas of investment:

First, we are significantly expanding our AI capacity. These investments are driving substantially all of our capital expenditure growth in 2023. There is some increased capital intensity that comes with moving more of our infrastructure to AI. It requires more expensive servers and networking equipment, and we are building new data centers specifically equipped to support next generation AI-hardware. We expect these investments to provide us a technology advantage and unlock meaningful improvements across many of our key initiatives, including Feed, Reels and ads. We are carefully evaluating the return we achieve from these investments, which will inform the scale of our AI investment beyond 2023.

Second, we are making ongoing investments in our data center footprint. In recent years, we have stepped up our investment in bringing more data center capacity online and that work is ongoing in 2023. We believe the additional data center capacity will provide us greater flexibility with the types of servers we purchase and allow us to use them for longer, which we expect to generate greater cost efficiencies over time.

These investments, along with revenue headwinds, are contributing to higher capital expenditures as a percentage of revenue in 2022 and 2023 than we expect over the long-term.

Turning now to the specific capex outlook for 2022 and 2023.

We expect 2022 capital expenditures, including principal payments on finance leases, to be in the range of \$32-33 billion, updated from our prior range of \$30-34 billion.

For 2023, we expect capital expenditures to be in the range of \$34-39 billion, driven by our investments in data centers, servers, and network infrastructure. An increase in AI capacity is driving substantially all of our capital expenditure growth in 2023.

Turning to tax. Absent any changes to U.S. tax law, we expect our fourth quarter 2022 and our full year 2023 tax rate to be similar to the third quarter 2022 rate.

In addition, as noted on previous calls, we continue to monitor developments regarding the viability of transatlantic data transfers and their potential impact on our European operations.

In closing, we are pleased with the growth of the community using our Family of Apps and the engagement improvements we are driving with efforts such as Reels and our AI-powered content recommendations. While we are facing near-term headwinds on revenue, the fundamentals are there for a return to stronger top-line growth. We are approaching 2023 with a focus on efficiency and spending discipline, and I am optimistic that these moves will set us up well to achieve our goal of driving operating income growth over the long-term while investing for future growth.

On a personal note, I will be closing out a decade at Meta in the next couple weeks including the last 8 years as CFO. In my new role, I am looking forward to continuing to help the company achieve its long-term mission and execute on its financial plan. I couldn't be happier to hand off the CFO role to Susan Li who is one of the most talented executives that I have had a chance to work with in my long career in finance and tech.

And with that, Martin, let me open up the call for questions.

Operator: Thank you. We will now open the lines for a question and answer session. To ask a question, press one followed by the number four on your touchtone phone. Please pick up your handset before asking your question to ensure clarity. If you are streaming today's call, please mute your computer speakers. And your first question comes from the line of Brian Nowak with Morgan Stanley.

Brian Nowak: Thanks for taking my questions. If I could squeeze in two. The first one is on CapEx and return on invested capital. The CapEx spend and forward expectations are remaining somewhat higher than investors expected.

So Mark, can you maybe just give us some examples of what these new AI investments are going to enable you to do differently going forward than in the past? And what's a reasonable period in which investors should expect to see material incremental engagement or revenue from these?

And then the second one is on engagement. I thought your comments about incremental time spent from Reels were interesting. But maybe just to sort of address the big topic around time spent, can you give us any update on what U.S. time spent trends look like just to sort of give investors some incremental confidence in the durability of the platform in your oldest market? Thanks.

David Wehner: Yes, hey Brian, why don't I take the time spent question first, and then I'll hand it off to Susan on the CapEx question. So on time spent, we are really pleased with what we're seeing on engagement. And as Mark mentioned, Reels is incremental to time spent.

Specifically, in terms of aggregate time spent on Instagram and Facebook, both are up year-over-year in both the U.S. and globally. So while we're not specifically optimizing for time spent, those trends are positive. And we aren't specifically optimizing for time spent because that would tend to tilt us towards longer-form video, and we're actually focused more on short-form and other types of content. So just some color on time spent. And Susan, do you want to take the CapEx question?

Susan Li: Yes. Thanks, Brian. So as Dave mentioned in his script, we expect 2023 CapEx to be in the range of \$34 billion to \$39 billion, with our investments in AI driving all of that growth. We're very focused on evaluating the ROI of our AI investments, and that'll inform our level of future spend. But so far, we've seen continued strong impact on our recommendations products from advancing developments in our AI work.

In the Q2 call, we had shared that a single AI advancement in scaling our recommendations models had led to a 15% watch time gain for Facebook Reels, and that gain has continued to grow. And we expect that there will be additional Watch time improvements coming from that work.

On the ads side, we're also continuing to roll out more AI and ML improvements in some of the new ads offerings, and we're encouraged by all of the early examples that we've seen. So this is something that we'll be watching very closely.

We think we're early in this journey, but our level of CapEx investment will depend on the returns that we generate through these investments in AI. And if we generate significant engagement and revenue gains, we'll continue investing here. And if we don't, we'll pace our spending accordingly.

Operator: Your next question comes from the line of Mark Shmulik with Bernstein.

Mark Shmulik: Yes, hi, thanks for taking the question. A couple, if I may. Mark, the first one, you kind of mentioned in your opening remarks that you expect to get back to kind of revenue growth in 2023. Any color you can share on kind of the key drivers behind that? And how much of that is macro-driven versus some of these initiatives that you guys are working on?

And then secondly, for Susan, as we think about kind of the operating expense guidance into 2023, I know historically, those numbers have tended to skew a bit conservative. How much conservatism is baked in there? And how much flexibility is there to kind of toggle some of those expenses depending on the health of core?

David Wehner: So Mark, it's Dave. I'll take the first question. Obviously, we're continuing to see significant macro headwinds in the business. We do think there's a big cyclical factor here, so some of it is just going to depend on the broader economy and recovery that we see.

But we're continuing to make progress in a number of areas in terms of growth, and Mark cited one of those, which is click-to-messaging ads, which has been a solid grower. It's a \$9 billion revenue run rate today, and we're continuing to make good progress on click-to-messaging ads as a driver that's especially been important in some of the developing markets.

And overall, we're focusing on a number of areas to grow revenue as we get through this tough cycle. And we're seeing progress on a number of fronts, but it's going to depend to some extent on what the overall macro climate is like. We're not going to be facing as significant headwinds next year from the signals point of view as we are now lapping the big changes that were made on the iOS platform. So that's going to also not factor in as strongly in our growth rates next year.

Susan Li: And I'll take that second question on next year's OpEx guide. One thing I'd point out first is just next year's guide includes an estimated \$2 billion in 2023 expenses that are one-time charges as part of our office facilities consolidation as we continue to

rationalize our real estate footprint. We also expect a little over half of our expense dollar growth in 2023 to come from OpEx, with the rest coming from cost of revenue.

On the OpEx side, the growth in 2023 OpEx is primarily driven by headcount-related costs from employees that we've already hired through 2022, and those hires have primarily been concentrated in technical and more senior roles. So we expect the slowdown in payroll growth in 2023 will be the result of the slowdown in headcount growth overall. As we mentioned, we expect to end 2023 with headcount roughly flat to where we are now.

And on the cost of revenue side, we expect the growth rate of cost of revenue to accelerate in '23 driven by the increased depreciation that we're seeing play through from the big CapEx investments that we've made so far and then as well as from Reality Labs with the launch of the next generation of the consumer Quest headset later next year.

Operator: Your next question comes from the line of Justin Post with Bank of America.

Justin Post: Great, a couple of questions on the Reels transition. When you think about that business, and people coming to the site, do you think -- how does it compare to the News Feed as far as repeat rates or retention? And are you a little worried that it's a little less proprietary than your prior content?

And then second, I think there are a lot of questions on CapEx. Just wondering if the build here for this year and next is one-time to kind of get your capabilities in place, and then maybe you can go back to kind of a mid-teens level as a percentage of revenue or is just the transition in the business just a higher capital intensity business. Thank you.

David Wehner: So Justin, on the Reels transition, as Mark noted, it is incremental to time spent. So we are seeing a benefit from Reels to contributing to overall engagement on the platform.

And it's contributing to healthy engagement dynamics. And I'd say that, coupled with our recommendation engine, which is also increasing engagement on the platform, are both promising trends on the engagement front. From a monetization perspective, we are still working to close the gap between Reels and Feeds and Stories, but it's going to take time before Reels becomes a tailwind to revenue.

As Mark mentioned, we're on about a \$3 billion run rate today, but Reels was still negative overall to revenue by about \$500 million in the quarter. So we expect that it should be a tailwind to the business eventually. And we're sort of saying that's probably in the 12- to 18-month time frame. But overall, we're pleased with the impact that Reels has on the business, specifically on the engagement front.

Susan Li: And on your second question about the CapEx guide, I would really think about our CapEx investment as kind of the AI and non-AI components. On the AI side, which

really is driving all of the CapEx growth in 2023, we will be pacing that future investment on the basis of the returns that we're able to see and measure. So frankly, we're hopeful that there will be a big opportunity to invest more here because we expect that this will be a high ROI area of investment for us.

On the non-AI side, a lot of that spend is in ongoing investments on our data center footprint where we had stepped up our investment in recent years to build sort of ahead of our anticipated capacity needs, and that work continues in 2023. We do expect this component of our CapEx spend to become more efficient over time, and we're actively looking for more efficiencies there.

So I don't know that we are benchmarking to an exact number on the combination of those two things. The future intensity, I think, is going to depend on the returns that we generate through those increased AI investments.

Mark Zuckerberg: Yes. And maybe I'll just add some color on how I'm seeing this, too, just because the Reels and discovery engine work is such a big part of what we're spending our time and energy on right now.

I think there are two comparisons to the things that we've done in the past here that are worth anchoring on. For Reels monetization specifically, any time we've had a new format, like when we added Stories or even before that when we were primarily on desktop and we shifted to mobile feed, we sort of had this dynamic where we focused on increasing engagement and growing demand for the product.

But while that was happening, monetization efficiency for the new format lagged behind kind of the News Feed or mobile News Feed compared to Stories for some period while that was ramping up. And while it's really hard for us to answer questions now that are like what is the eventual monetization efficiency going to be, it's really hard to predict that in advance.

What I can say is I think on Stories, we've ended up achieving something that was way greater than what we even hoped to achieve at the time, right, in terms of where we thought that Stories could net out. And a lot of the progress that we've been making on Reels monetization so far has been at a clip that we've been pretty happy with.

So obviously, we want to close the monetization gap as quickly as possible. We want this to be a tailwind, not a headwind. I think we're going to get there. It's -- but I think we've gone through a few of these transitions, and I think that'll just take some time.

On the engagement side, in terms of how incremental this is, the basic way to think about this is you have a set amount of inventory across the system. There's content from family and friends, which is quite differentiated and valuable and accounts that you follow.

But now there's this whole larger corpus that we can use AI to effectively understand what the content means and understand individually what you might be interested in, just have access to a much bigger corpus of content to put into your feeds and increase engagement.

And we're seeing that start to work already and be incremental in terms of having more people use the services, having them spend more time, having them spend -- just engage more in feeds overall. So that part of things we think is going well.

We think we'll -- we should be able to continue driving results. Some of the results already have been due to some of the AI investments and infrastructure that we've made. If our bets are correct, then the AI CapEx that we're bringing online should be able to drive incremental engagement that's pretty meaningful there. But we think qualitatively that investment makes just a lot of sense given the direction that the world seems to be going in.

And I do think that our somewhat unique mix of both having the kind of social friends and family content and the ability to drive recommendations, which I agree with some -- the premise of the question there, and that creators do want their content to be on multiple platforms, which I think is a little bit different from friends content where you want to, for the most part, share where your friends are, and you're not trying to have it be everywhere.

I think we should be able to do pretty well on both of those, and that should grow over time. But that's -- it's hard for us to be more specific than that now, but I do think that these trends -- I mean I get that this takes a little longer to play out than you would want. But we've been through a couple of these cycles before already, and I'm pretty confident this is going in a good direction.

Operator: Your next question comes from the line of Doug Anmuth with JPMorgan.

Doug Anmuth: Thanks for taking the questions. I have two. Dave, you talked about the ATT impact diminishing in 3Q just as you lap the rollout. Curious if you're seeing any meaningful improvements around ATT. Or is this just a function of the year-over-year comp dynamic?

And then second, can you just talk about your efforts to attract content creators to Reels? And does revenue sharing impact your margin structure versus the current ad formats and surfaces? Thanks.

David Wehner: So in terms of ATT impact, we're -- the primary factor is the lapping factor relative to Q2. So in Q2 of 2021, ATT had not been fully rolled out. It was largely rolled out by Q3 of '21. So the fact that we were lapping that period in the third quarter, we got a benefit relative to the second quarter, but that was offset by continued macro weakness.

In terms of the efforts to attract content creators, and specifically as it relates to the overall cost structure, we don't anticipate that that's going to have a meaningful impact to the cost structure. And obviously, it's factored into our expense guidance.

Operator: Your next question comes from the line of Eric Sheridan with Goldman Sachs.

Eric Sheridan: Thanks for taking the questions. Maybe two, if I can. Mark, I would love you to weigh in. Obviously, the company has faced a lot of headwinds from platform changes, competitive dynamics, and a lot of macro impact, as we've talked about over the last 12 to 24 months.

How much of this investment cycle is informed by your views around future-proofing the platform, so there are less externalities that can impact it and you're in control more of your own destiny versus elements of curveballs that can be thrown at you that can cause volatility in the business in the medium to long term?

And then I'd love to ask one on the metaverse. Understood on the investment cadence in the metaverse over the next couple of years. Even if qualitatively, how should investors think about the revenue opportunity over the next 3 to 5 years split between the hardware opportunity and the non-hardware opportunity as you see it as the metaverse evolves?

Mark Zuckerberg: Sure. Let's -- I can take the first one and then -- I mean I guess I could take the second one, too. So the first question was -- what was this... Yeah. Right. Okay. So I think that that's a factor, but it's not the primary thing that's driving it. So on the business side, I think certainly, you see dynamics like what Apple has done with ATT and continues to do in some ways with the policy that they announced yesterday, which are obviously big risks and we see as issues.

But there are also other things that -- like we just believe that -- and we've invested so much in measurement over time because -- since our ads help people higher up in the funnel than search ads, for example, we think that often, less of the value of sales is attributed to us than it should be.

So for all these reasons, having a funnel that's more integrated where we do more commerce internally, this is a big part of what we hope to achieve with business messaging.

And the fact that you can find a customer, have a thread directly with them in a business chat and be able to sell a product directly or to be able to do customer support and then help people out with the product and then maybe sell them something else, that kind of integration, I think, is going to be valuable very broadly in terms of making sure that the value that we're creating for businesses and consumers can be more efficiently measured and attributed to our services.

A lot of this, though, is it's not just about fortifying against outside threats. A lot of this is just you can build new and innovative things by -- when you control more of the stack yourself.

I mean in the metaverse sense, a lot of the things that we're trying to enable, right, this feeling of presence, which in a lot of ways is sort of the ultimate social experience when you do it physically or eventually when -- as you're doing it virtually, being able to design the hardware so that way you can have sensors that can help map your facial expressions and emotions to the avatar that you have, virtually, I think, is going to be just a very profound experience.

And you can start to experience that with Quest Pro, which is out now. And it's just not clear if we weren't driving this forward that anyone else would be. So I think that that sort of integration and innovation is really helpful.

Similarly, I think the fact that we can create a lot of the business and commerce platform around our messaging products, but then link to them from Facebook and Instagram creates some unique experiences that I think would be very hard to create otherwise as well just in terms of having that kind of full loop in the product.

So that like enabling more experiences, I think, is really the primary driver. And then the sort of fortification against external risks is certainly a strategic advantage over the long term, but probably not the only reason why we're doing this.

Operator: Your next question comes from the line of Youssef Squali with Truist.

Youssef Squali: Great, thank you very much. Maybe one question for Dave or Susan and then one for Mark. What kind of base case assumptions for macro are you guys baking in for 2023 with -- against that 12% to 15% increase in OpEx and CapEx guide? And can you talk about maybe the fixed versus variable component in the expense guide that could give you the flexibility to address any material macro changes next year?

And Mark, relative to your own expectations when you decided to pursue the metaverse strategy a couple of years ago, how would you rate the company's performance to date in terms of product rollout, engagement with things like Horizon World, et cetera? And is the opportunity evolving in line with your expectations? And if not, what are the key gating factors? Thank you.

Susan Li: Hi, it's Susan on the first question. We haven't given revenue guidance yet for 2023, but our Q4 2022 guide is a range, and that range certainly encompasses, I think, a wide variety of macro expectations. We're certainly in a period right now where we are seeing a slowdown in advertising demand, and that correlates with a lot of things that we're seeing outside of just our sector here, including rising inflation and supply chain issues sort of more broadly across the economy.

So with that in mind, we have undertaken a 2023 budget process that has applied higher scrutiny to almost all of the areas of our very broad investment portfolio, and we have taken what is an intentionally more conservative approach to our budget and our anticipated growth.

You asked about the sort of fixed versus variable components of the 2023 OpEx guide. I think I'd mentioned that over half -- a little over half of that is coming from OpEx, the rest from cost of revenue. So the cost of revenue piece that has the sort of the growth in depreciation, which is certainly fixed and is just playing through from prior year CapEx growth. Part of that is coming from Reality Labs and the launch of the next-gen consumer Quest headset. So that sort of corresponds to the product launch.

And then on the OpEx side, we -- a lot of the growth in 2023 OpEx is coming from employees who we've already hired. We expect that we're going to have the same number of employees end of 2023. So that's an area where we're pretty focused on being disciplined also. And then finally, I'd just mention, again, there's that \$2 billion office facilities consolidation charge that's also included in the '23 OpEx guide.

Mark Zuckerberg: Sure. And in terms of the metaverse efforts and kind of how we're doing compared to what I expected, it's a pretty wide portfolio of things that we're working on, which I think is important to internalize because the -- what I think most people see are the VR headsets, right? Because that's sort of the first thing that we launched, and Quest 2 is the first mainstream VR headset. I kind of think about what we're doing.

There's four major platforms that we're focused on developing. One is the kind of social metaverse platform where you see an early version of that with Horizon with the avatar system. And that's an area where we're really -- we're iterating out in the open, right? It's a kind of a live early product platform, and that's evolving quickly, but obviously has a long way to go before it's going to be what we aspire for it to be.

But that's one important area that's given what we do is sort of the social company that's about people interacting, how you express yourself in all forms, the kind of expressive avatars, the photorealistic avatars. We think we're doing some leading work there. But obviously, we need to get that into the product and continue iterating on that.

VR is the second major platform. And there, I think that there's going to be a consumer-focused product that probably will reach very large scale, but there's also, I think, going to be a work-focused product that -- it's like you don't do most of your work on a \$500 device. We have computers and workstations that are much more powerful and have more technology in them. And I think that that's going to end up being similar here as well. So we started that with Quest Pro, and that's -- we're sort of at the start of the journey there.

The two other areas, which are mostly -- which are still internal, is a lot of the work on augmented reality, which is a quite a large effort but, we think, is going to be just a huge part of the value that gets created over time. And there, we -- a lot of what I'm judging is how well are the R&D efforts going. There are some kind of basic things that we need to get right, some integration of things, some figuring out how to manufacture things and where we're making progress on that.

And I'd say a bunch of that is that there are some things that are going better than I expected, some things that seem like they might take a bit longer. But overall, I mean, there's -- none of the indications that I have would suggest that anyone else in the world is doing leading work ahead of us in those areas, even though we have not obviously shipped the AR glasses yet.

And then the fourth platform after the kind of social platforms, VR and AR, is neural interfaces, which I think the kind of risk-based EMG interface, which is, for all these computing platforms, there's going to end up being -- input is a really important part, how do you basically control the computing platform.

And we think by the time that you have glasses, and you're kind of walking down the street with glasses, you're not going to have controllers with that, you're not going to want to have your hands kind of like hovering in the air, and you're not always going to want to talk to the thing, even though that's going to be one way that we use them a bunch of the time. Sometimes you're going to want something that's more private.

So we think that having a discrete way to basically communicate with the device is going to be critical. And that's also an area where, as far as I can see, the research that we're doing is really leading here. So it's a pretty big surface.

I know that sometimes when we ship a product, there's a meme where people say, "Hey, you're spending all this money, and you've produced this thing," and it's -- I think that that's not really the right way to think about it. I think there's a number of different products and platforms that we're building where we think we're doing leading work that will become -- launching consumer products and then eventually mature products at different cadences in different periods of time over the next 5 to 10 years. And in all of these areas, I think the teams are making very good progress. And I think that this will be fundamentally important for the future.

Nothing that we're seeing suggests that that's not going to be the case. We are pacing a bunch of the investments given the kind of macroeconomic environment and the rest of the business performance.

But ultimately, I mean, look, I get that a lot of people might disagree with this investment. But from what I can tell, I think that this is going to be a very important thing, and I think it would be a mistake for us to not focus on any of these areas, which I think are going to be fundamentally important to the future. So we're going to try to do this in a way that is responsible and matches the way that the rest of the business is growing over time.

And I think we've built up the team to a point now where I think we'll be able to kind of match that growth with the rest of the business more going forward. But over time, I think that these are going to end up being very important investments for the future of our business. And I think it's some of the most historic work that we're doing that I think people are going to look back on decades from now and talk about the importance of the work that was done here.

Operator: Your next question comes from the line of Mark Mahaney with Evercore ISI.

Mark Mahaney: I want to follow up on a prior question. It's back on the ad tools. And I'm trying to figure out how much of a priority it is for the company and how long the company thinks it can take to kind of recover or to create a new, I don't know, probabilistic ad attribution model, probabilistically based ad targeting model.

This is something that took \$10 billion maybe out of your business. I mean it had a material financial impact. And listening to the call, I just don't hear it as a major investment priority. So the challenge -- the question is, is it a major investment priority? Or is it that, that goal is just elusive, and it's better to focus on other things? Thanks a lot.

Marne Levine: Hi Mark, I'll take this question. We have continued our broader work to rebuild meaningful elements of our ad tech. So our system can improve performance and measurement with -- and we've been making investments in the short and the medium term and over the long term.

In the short and the medium term, what we've been very focused on is evolving our ad system by growing on-site conversions with products like lead ads and ads that click-to-message. And we're continuing to make investments in AI and machine learning to improve measurement, targeting and delivery.

We have been pleased with our progress that we've made this quarter to help advertisers improve performance, targeting and measurement. I would be remiss if I didn't talk about how AI and ML is really helping advertisers. One example of this is Advantage+ Shopping. We launched it in August. It's a product that's enabled by machine learning that helps clients test, learn and optimize their campaigns faster.

It's early, but a recent test across a cross-section of advertisers found that those using Advantage+ Shopping campaign saw a 32% increase in return on ad spend. Over the longer term, we're focused on investing in privacy-enhancing technologies, both our own portfolio of solutions, but also working with the industry to do that. And all of this is in the spirit of investing in this technology to help advertisers get more value.

Deborah Crawford: Great. Thanks, Marne. We have -- operator, we have time for one last question.

Operator: Thank you. That will come from the line of Brent Thill with Jefferies.

Brent Thill: I think kind of summing up how investors are feeling right now is that there are just too many experimental bets versus proven bets on the core. And I'm curious if you can just add more color why you don't feel these are experimental. You feel like they pay off. There's obviously a lot of focus on the investment side. I think everyone would love to hear why you think this pays off.

David Wehner: Yes. Let me take at least part of that. I mean we're making a number of investments across the portfolio. Marne outlined some that we're making in the ad space. Obviously, the investments that we're making in product areas like Reels and the business messaging platform at WhatsApp are ones that we think will have a significant payoff for the -- in business, both in terms of engagement and monetization.

So we're making a wide portfolio of bets. Still, the majority of our spending is directed towards our Family of Apps investment, and those are across both engagement and monetization, leveraging AI in many cases.

And we're making good progress on those fronts and then leveraging as well what is today a fairly under-monetized resource in terms of our messaging platforms, building more scale around those as being a source of future revenue growth. We've already proven it out with our business -- our click-to-message ads with a \$9 billion business today. We think we can build a substantial sized business around paid messaging, which will complement that as well. So I think we've got a lot of bets across the Family of Apps portfolio in addition to the work that we're doing on Reality Labs and the Metaverse.

Mark Zuckerberg: Yes. I mean I'd just say that there's a difference between something being experimental and not knowing how good it's going to end up being. But I think a lot of the things that we're working on across the Family of Apps are we're quite confident that they're going to work and be good.

The Reels work, the discovery engine work, all the ads work on signals, the business messaging work, I -- we can't tell you right now how big they're going to scale to be. But I think that each of these things are kind of going in the right direction. Obviously, the metaverse work is a longer-term set of efforts that we're working on. But I don't know. I think that that is going to end up working, too.

So yes. I think that, look, there are a number of different -- there are a lot of things going on right now in the business and in the world. And so it's hard to have, like, a simple we're going to do this one thing, and that's going to solve all the issues. I mean there's macroeconomic issues. There's a lot of competition. There's ads challenges, especially coming from Apple.

And then there's some of the longer-term things that we're taking on expenses because we believe that they're going to provide greater returns over time. And I think we're going to resolve each of these things over different periods of time. And I appreciate the patience. And I think that those who are patient and invest with us will end up being rewarded.

Marne Levine: Just adding to what Mark just said, it is a challenging time for advertisers. And what they are focused on given the economic uncertainty is getting a strong return on investment. Going back to the Family of Apps and services, Reels continues to be the fastest-growing format on Instagram and Facebook, and it is a great way for people to discover new interests, creators and connect with businesses.

What we're focused on is making sure that businesses get a strong ROI on Reels. And one example that shows that we're delivering on this in terms of our investments is CORKCICLE, which is the insulated drinkware brand that added Reels to its business-as-usual strategy and saw a 34% higher return on ad spend and a 34% higher sales. So we are making progress with our investments and helping advertisers find that ROI that they're looking for.

Deborah Crawford: Great. Thank you, everybody, for joining us today. We appreciate your time, and we look forward to speaking with you again.

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