

C O R P O R A T E P A R T I C I P A N T S

Vernon Essi, *Investor Relations*

Joshua Bixby, *Chief Executive Officer*

Ron Kisling, *Chief Financial Officer*

C O N F E R E N C E C A L L P A R T I C I P A N T S

Ranjeet Singh, *Morgan Stanley*

Frank Louthan, *Raymond James*

James Fish, *Piper Sandler*

James Breen, *William Blair*

Will Power, *Robert W. Baird*

Jeff Van Rhee, *Craig-Hallum*

Fatima Boolani, *Citigroup*

Rudy Kessinger, *D.A. Davidson*

P R E S E N T A T I O N

Operator

Good day. My name is Savannah and I will be your conference call operator today. At this time, I would like to welcome everyone to the Fastly Fourth Quarter and Full Year 2021 Financial Results Call.

I would now like to turn the conference over to Vernon Essi, Investor Relations at Fastly. Please go ahead.

Vernon Essi

Thank you. Welcome everyone to our Fourth Quarter and Full Year 2021 Earnings conference call. We have Fastly's CEO, Joshua Bixby; and CFO, Ron Kisling with us today.

The webcast of this call can be accessed through our website, fastly.com, and will be archived for one year. Also, a replay will be available by dialing 800-770-2030 and referencing conference ID number 7543239 shortly after the conclusion of today's call. A copy of today's earnings press release, related financial tables and investor supplement, all of which are furnished in our 8-K filing today, can be found in the Investor Relations portion of Fastly's website.

During this call, we will make forward-looking statements, including statements related to the expected performance of our business, future financial results, strategy, long-term growth and overall future prospects. These statements are subject to known and unknown risks, uncertainties and assumptions that could cause actual results to differ materially from those projected or implied during the call.

For further information regarding risk factors for our business, please refer to our most recent annual and quarterly reports on Forms 10-K and 10-Q filed with the SEC and our fourth quarter 2021 earnings release and supplement for a discussion of the factors that could cause our results to differ. Please refer in particular to the section entitled Risk Factors. We encourage you to read these documents. Also, note that the forward-looking statements on this call are based on information available to us as of today's date. We disclaim any obligation to update any forward-looking statements except as required by law.

Also during this call, we will discuss certain non-GAAP financial measures. Unless otherwise noted, all numbers we discuss today other than revenue will be on an adjusted non-GAAP basis. Reconciliations to the most directly comparable GAAP financial measures are provided in the earnings release and supplement on our Investor Relations website. These non-GAAP measures are not intended to be a substitute for our GAAP results.

Before we begin our prepared comments, please note that we will be attending Morgan Stanley's Technology Media and Telecom Conference in San Francisco on March 7. Also, we will be hosting an Analyst Day on May 12 in New York City and we will be releasing further details regarding this event in the coming weeks.

With that, I'll turn the call over to Joshua. Joshua?

Joshua Bixby

Thank you, Vernon. Hi, everyone, and thanks for joining us today. I'm very pleased with our fourth quarter results. We increased our revenue to \$97.7 million, a 13% quarter-over-quarter organic increase. This is by far our highest sequential growth since Q2 2020 and represents our third fastest sequential gain since we became a public company.

Our customer retention and growth engine is strong. Our Q4 DBNER remains very robust and increased to 121% and our LTM NRR was 118%, up from 114% in Q3. We closed out the year with an annual revenue churn of less than 1% and an annual revenue retention rate of 99.2%. Fastly's value proposition to our customers is strong and our execution continues to improve.

I'm excited to share with you key developments that will continue to drive our execution, further enhance our product offering and differentiate us from our competitors.

As most of you know, we've been retooling Fastly for the next chapter of growth, onboarding a number of new key executives in 2021. These include Chief Revenue Officer, Brett Shirk, early in 2021; Chief Financial Officer, Ron Kisling, midyear; and more recently Chief Product Officer, Lakshmi Sharma; and Chief Marketing Officer, Margaret Arakawa. What all of these executives have in common is experience scaling complex businesses with highly relevant cloud, security and go-to-market expertise from companies like Microsoft, Google and VMware.

The team is united in our common mission, which is to fuel the next modern digital experience by providing developers with a programmable and reliable edge cloud network that they adopt as their own. One of the best parts of recruiting new executives is to see how excited they are when they realize how truly differentiated our foundational technology is from our competitors and how much opportunity exists in our business for growth.

Central to this excitement is the key role developers play in our journey and the new and expanding power of distributed edge compute and security. This all ties into the Fastly vision. We envision a world where all digital experiences are fast, engaging and safe for everyone. This vision, as simple as it sounds, sets the tone for everything we do. This is evident in our edge cloud network's three core tenets: one, developers must be empowered to innovate; two, our enterprise platform must innovate ahead of market demands while still being reliable, scalable and secure; and three, we must provide exceptional flexibility and support.

Fastly empowers developers at the moment of inspiration and ushers them on a journey to see their dreams come to life at the cloud edge with frictionless scale, security and performance. To most of us as end users, this inspiration and development goes unnoticed until we experience it by using an e-commerce application that is instant, or loading a very popular website with content curated to our liking. All of which were developed on our infrastructure using our software.

We literally touch billions of lives every day with our platform. In the fourth quarter, one of the largest publicly traded user review platforms leveraged Fastly's compute network to securing cash APIs, to crowdsource reviews about businesses for consumers all over the world. They are now able to deliver great experiences and iterate quickly at the edge to accelerate their time to market with new features. We are relentlessly innovating on our platform to anticipate market demands, skating to where the puck will be.

Our platform is highly programmable, agile, fast, secure, built on open standards and can scale at lightning speeds. And make no mistake, these are very big differentiators relative to our competitors. Our differentiation starts with the scale and efficiency of our distributed network. Our delivery business, which is underpinned by our delivery portfolio, including our content delivery network or CDN, remains one of the fastest in the world. In the quarter, our worldwide network remains on average 30% faster in the U.S. and Europe than our largest competitor in most countries and regions as measured by independent real user data.

Our significant advantage and performance validates our unique architecture. Performance is one of the most critical decision making metrics for our customers. That is why we see us winning business with marquee customers like a Fortune 500, American diversified multinational mass media and entertainment conglomerate this past quarter. They chose Fastly due to our superior performance and global reach. They also joined a growing list of our customers that have quickly expanded beyond delivery to run security features with our Compute@Edge platform, which is a great affirmation of our land and expand strategy. It also further validates our view that delivery is a means to the edge.

Fast delivery is critical, but so is efficient scale. The efficiency of our nearly 200 terabit per second global network is very hard for others to replicate. And only a few companies in the world have a network of this size. The size of our network matters as it opens up opportunities to us that are close to others.

In the fourth quarter, we signed a Fortune 500 American mass media company news network for a Lighthouse project built on Fastly's edge cloud network. The ability to give full control to their developers using our compute platform as the inception, which is critical in their success but it required a network of our size and reach. Fastly allowed them to speed up their mobile application by pushing content closer to

users, transforming and serving images faster from the edge and securing their digital property and application.

Fastly's software defined network which powers our efficiency remains a key differentiator, while our network delivers nearly half the traffic of our largest competitor at peak. We are running a 98% fewer servers based on data from their website. This is obviously transformational. We truly are enabling the next technological revolution. Some may refer to this as Industry 4.0 or in some instances Web 3.0 or even powering the emerging metaverse. We are buzzword agnostic on this. And you can call it whatever you like, it's all involves distributed, fast, scalable and secure experiences. And we know it's in increasingly higher demand from our customers.

This quarter, we would like to share with you some key principles, which underlie our high level product strategy.

One, we are built by developers for developers. We are differentiated in the marketplace as an open community that developers want to develop with and a company that you want to do business with. And we are focused on meeting developers where they're at, by making things easier for them.

We believe this will accelerate customer acquisition and drive enterprise adoption. Underscoring the openness of our development environment, since our last earnings call, developers have created their own native support for programming languages such as JavaScript, Swift, and Zig on Fastly's Compute@Edge platform.

We also recently introduced Cloud Deploy, a wizard that customizes existing templates, creating an automated deployment workflow with best development practices and the fastest one-button deployment in the industry. We simply make things as easy as possible for developers. Last quarter, we introduced our Compute@Edge credit program, which offered qualifying enterprises the opportunity to encourage their exploration and experimentation on the platform.

I'm pleased to share that nearly 40 customers took advantage of the program and, due to the success of the program, we continued it through Q1 of 2022.

Two, we have the fastest and most reliable programmable edge. Edge programmability is becoming a key decision-making criteria for enterprise buyers. A prime example was a leading platform provider of streaming technology and services for businesses. We architected their infrastructure using our Compute@Edge platform to both minimize costs and improve ease of use.

Another great example is our partnership with Glitch. Their new integration with Fastly's Compute@Edge will enable sophisticated Glitch sites that scale infinitely, with 100 times faster code execution start-up time than other serverless solutions. In the first week of our launch, we received over 2,000 enterprise developer sign-ups for the Compute@Edge beta on Glitch.

And third, confidence inspiring security everywhere. Our network is uniquely architected to enable modern security. We see increased momentum in our security offerings. For example, in the fourth quarter, a global Fortune 500 insurance provider switched to Fastly after having issues with the inflexible deployment of their legacy solution. Migration over to Fastly's Next-Gen WAF, gave them flexibility to deploy this solution both on-premises and in the cloud.

As security is an integral element to our product strategy, I'm very excited to share with you the recent availability of the edge deployment of our Next-Gen WAF, the industry's first and only unified WAF. This is built on Compute@Edge. Unlike legacy rule based WAFs, Fastly's Next-Generation WAF enables greater scalability, higher efficacy and lower total cost of ownership. This modern unified web application and API

protection solution will power and protect companies looking to further or begin their digital transformation. This deployment formally completes the integration of Signal Sciences' industry-leading WAF.

And the customer response has been great. One of the world's leading Fortune 50 financial services companies was looking for a way to provide advanced web security across their application and infrastructure in a frictionless way without impacting performance. They chose the Fastly Next-Gen WAF powered by Signal Sciences because the unique signals-based technology gave them confidence in knowing their critical web apps and APIs were safe from advanced threats. Also, the ease of deployment across various infrastructures facilitated rolling out more applications globally in the future.

We look to the Next-Gen WAF announcement and customer examples as the first in a string of many in 2022 that will be geared toward product execution and customer success. The team is excited about the opportunity that lies ahead in 2022. I look forward to sharing with you further updates on our success when we meet up for our Analyst Day in May, where we will provide key updates on our long-term goals on our product and go-to-market strategies.

To discuss the financial details of the quarter and guidance, I will now turn the call over to Ron. Ron?

Ron Kisling

Thank you, Joshua. Thanks everyone for joining us. I'm still relatively new to Fastly. And I'm happy to be able to share our financial results and outlook with you on this my second earnings call at Fastly. I'm excited about the opportunity here at Fastly and the opportunities our differentiated technology gives us to drive growth and deliver fast, engaging and safe digital experiences for everyone. We're building a strong team in finance to build strategic insight into our business and to support Fastly in executing on our goals and the vision Joshua discussed.

Today, I will discuss our financial results and business metrics and then review our forward guidance. Note that unless otherwise stated, all financial results in my discussion are non-GAAP based.

Total revenue for the fourth quarter increased 18% year-over-year to \$97.7 million, exceeding our guidance of \$90 million to \$93 million by 7% over our guidance midpoint. In the fourth quarter, revenue from Signal Sciences products was 11% of revenue, an increase of 58% over Q4 2020, which included a full quarter of Signal Sciences revenue.

For the full year 2021, total revenue was \$354 million, up 22% year-over-year. Revenue growth was driven in part by revenue generated from products acquired from the acquisition of Signal Sciences in Q4 2020 and increased adoption of our modern edge network and products. Our dollar-based net expansion rate, or DBNER, increased from 118% to 121% sequentially. We believe DBNER is a key metric in measuring the long-term value of our customer relationships and our ability to grow our revenue through increased usage of our platform and purchase of additional products by our existing customers.

It is calculated on a trailing 12-month basis and removes churn customers as well as new customers during that 12-month period. Our trailing 12-month net retention rate increased from 114% to 118% sequentially. We believe that our LTM net retention rate removes some of the usage base and seasonal volatility that is inherent in our business model. Unlike DBNER, NRR includes customer additions as well as churn.

As Joshua stated earlier, our annual retention rate was 99.2% and is reflective of very low customer churn of less than 1%. We believe this is one of the lowest churn metrics in the industry. As of December 31, 2021, we had 2,804 customers, of which 445 were classified as enterprise. Those customers with an

excess of \$100,000 of revenue over the previous 12 months. Our total customer count grew 21% over December 31, 2020. We added 56 net new customers and 15 net new enterprise customers in the fourth quarter compared to 167 and 22, respectively, in the prior quarter.

The sequential decline in net new customers was related to the seasonal trend of lower customer additions in the fourth quarter and the introduction of a new free tier for Compute@Edge developers, which increased the total developers on the platform, but likely impacted new customer sign-ups at the lower end. As you can see from our very low churn rate of less than 1%, our customer acquisition dynamics remains strong.

Enterprise customers accounted for 88% of total revenue on a trailing 12-month basis, in line with their contribution in Q3 and increased their average spend to \$704,000 from \$698,000 in the previous quarter. We also saw a reduction in revenue concentration as we grew our customer base. Our top 10 customers comprised 33% of our total revenues in the full year 2021 compared to 38% of our total revenues in the full year 2020.

Turning now to gross margin. Our gross margin was 55.8% for the fourth quarter compared to 57.5% in the third quarter. As we've stated in prior quarters, gross margin was impacted by the timing and extent of our network investments, network utilization and the mix of our revenue between customer segments. We did not see an increase in price compression across our customer segments in Q4.

We are continuing to innovate on our software-defined network by rolling out our next-generation architecture in 2022. As we roll out our new site, we will continue to incur costs on our existing sites until this transition is complete. Additionally, to address supply chain constraints, we accelerated investment to ensure adequate availability of equipment. These two factors are expected to reduce our 2022 gross margin by a couple of hundred basis points as compared to our fourth quarter gross margin.

We are committed to monitor our gross margin levels against ongoing investments in cloud computing and security. We are confident these investments will drive increased efficiency and lower costs across our network over time. When combined with the impact of increasing security revenue mix as a share of our revenue and growing revenues from Compute@Edge, we will see increased leverage and improved gross margins in the medium to long-term. We will provide further details on our strategy at our Analyst Day in May.

Operating expenses were \$66.3 million in the fourth quarter, up 7.7% over Q4 2020. Operating expenses grew 34% to \$259.6 million in 2021 from \$194.1 million in 2020 due to headcount and other expenses from the Signal Sciences acquisition in Q4 2020 and increased investments during 2021. Our operating loss for the quarter was \$11.7 million, 29% under the midpoint of our operating loss guidance of \$18 million to \$15 million, driven by higher revenues.

Net loss for Q4 2021 was \$11.7 million or a \$0.10 loss per basic and diluted share compared to \$10.5 million and a \$0.09 loss for per basic and diluted share in Q4 2020. Net loss for fiscal year 2021 was \$55.9 million or \$0.48 loss per basic and diluted share compared to \$19 million for full year 2020 or an \$0.18 loss per basic and diluted share in 2020.

Turning now to the balance sheet. We ended Q4 2021 with \$1.1 billion in cash, cash equivalents, marketable securities and investments, including those classified as long-term. Our capital expenditures were 7% of revenue in the fourth quarter and 14% for the fiscal year 2021, in line with our previously communicated range of 12% to 14%. Our capital expenditures include capitalized software. This, along with our foundational technology, drive efficiency and leverage in our network, which, as Joshua mentioned, is a competitive differentiator. And despite our transition to our next-generation network

architecture, an acceleration of some investment due to supply chain constraints, we expect our capital expenditures in 2022 to remain at 12% to 14% of revenue.

I will now turn to discuss our outlook for the first quarter and the full year 2022. I would like to remind everyone again that the following statements are based on current expectations as of today and include forward-looking statements. Actual results may differ materially. We disclaim any obligation to update these forward-looking statements in the future except as required by law.

Our first quarter and full year 2022 outlook reflects our continued ability to deliver strong top line growth via improved customer acquisition and product enhancements. Our revenue guidance is based on the visibility we have today. And given our usage-based business model, we expect to gain additional visibility to our annual guidance as the year progresses.

For the first quarter, we expect revenue in the range of \$97 million to \$100 million representing 16% annual growth at the midpoint. We expect a non-GAAP operating loss of \$15 million to \$18 million and a non-GAAP loss per share of \$0.13 to \$0.15 per share.

For the full year 2022, we expect revenue in the range of \$400 million to \$410 million; non-GAAP operating loss of \$60 million to \$70 million; and a non-GAAP net loss of \$0.50 to \$0.60 per share.

Before we open the line for questions, we would like to thank you for your interest and your support of Fastly, and we look forward to seeing you at our Investor Day in May. Operator?

Operator

Thank you. Our first question will come from Ranjeet Singh with Morgan Stanley. Please go ahead.

Ranjeet Singh

Thank you for taking the question. In reference on the Q4, really the sequential growth seem to be pretty good. As we look to the full year guide, Ron, I think you sort of alluded to it in your script that it's early days. But if I were just sort of to give you the basic sort of good equation of Fastly being traffic growth, minus price erosion, plus share gain or share loss, and then I guess we have Signal Sciences on top. As you look across those four dimensions, what are sort of the starting assumptions across each of those four variables for your 2022 guide?

Ron Kisling

So, a couple of things. One, to level set, our business is usage based, and so that inherent volatility is reflected in our results. I think as we look at it and particularly seeing what came off of Q4 is increasing usage across our key customers, growing our customer base over the course of the year. I think as we look at from a segment basis, we expect to see growth across all of our segments. A couple of things to highlight, I mentioned in Q4 and in prior quarters, we have seen our security business growing at a much faster rate. It's an important part of every discussion we have with customers. And so it will be one of the larger growers in terms of our revenue by product in 2022.

And I think lastly, when you start to look at pricing, I think what we saw in 2021 was a deceleration in price declines from what we have seen in the past. So I would expect that trend to continue in terms of that being relatively muted and guidance in security being the key drivers as we add customers.

Ranjeet Singh

Got it. And just as a follow up. You made up some operational goals for Compute@Edge, I think, program (phon) off the top of our head. I think it was 100,000 developers and really trying to boost the transactional volume. How do you feel like with the free credit program? How do you feel you're sort of tracking to those operational goals for 2022 on the Compute@Edge side?

Joshua Bixby

Yes. So we laid out two. The first one was transactional volume for '22. And then the second one, which is really critical is on the developer side. We launched a few really important programs at the end of Q3, which we saw growth in Q4. We talked about the credit program where we offered up to \$1 million for customers to onboard, get ready, experience, compute. That was a really significant success. So seeing 40 customers sign up for that and extending that program, that was really successful. And I think that that spoke to really the power of compute. And also how early this is? It does take customers' time to feel comfortable with moving those costs from central compute to the edge, the benefits are obvious, but they don't want to embarrass their CFO.

I think on the other side, and Ron talked about this, and I think it's an important dynamic, the success of the Compute@Edge trial free tier for developers is critical to us because what we know is the developers are the decision-makers. And when they try it, we were able to find all these great use cases and see the value.

As I mentioned, Glitch was a really interesting synergy there, really interesting business, and we were able to get 2,000 in the first week of having that onboarded. So we'll be giving updates at the analyst call specifically to both of those. But I was really pleased with the developer count and what we're seeing in that dynamic.

Ready for the next question.

Operator

Our next question will come from Frank Louthan with Raymond James. Please go ahead.

Frank Louthan

Great. Thank you. I wanted to come back to the top line growth. I mean, again, you're showing an 18% top line growth in Q1, midpoint is about 15%, and you're guiding below that. You're saying that Signal Sciences is going to see better growth in the year. Where is it that you're being cautious on the growth rate to be guiding where you are? Thanks.

Ron Kisling

Yes. I mean I think more broadly speaking, when we approach guidance, I think we certainly take into account the usage-based business and some of that volatility and end up with guidance that we feel we have a high degree of confidence in. I think as you point out, our Q1 revenue guidance reflects year-over-year growth at about 16%, in the full year kind of at 14%.

I think an important thing, if you start to look at kind of the seasonal trend across the quarters, what we've kind of seen in '21 is probably a better indicator. Twenty twenty was heavily impacted by COVID. And so I think, typically, as we look through the course of the year, Q2 is going to be flattish generally with Q1. We start to see a couple of percentage points, kind of an uptick in Q2 as you start to look at sequential growth. And then Q4 is typically up mid- to high-single digits. So I think that is kind of the trajectory.

And as we move through the year, we will gain additional visibility into our revenue and will continue to reflect that additional visibility into our guidance.

Frank Louthan

Okay, great. And can you talk a little bit to the increase in investments you're making that are adding to the operating losses? What exactly are you investing in there?

Ron Kisling

Yes. So I think there's two things. I think on the operating loss, if you kind of implicitly kind of back into our guidance, we are looking at an increase in investment across op ex. I would say there's two key areas where we're making that investment. One is continuing to invest in our sales organization, particularly around our enterprise sales organization, with the goal of increasing customers, particularly enterprise customers where we see growth in revenue. We have seen success in that over the course of the year with the growth in customers. And as we've seen, that also has driven a little bit less concentration in customers and less volatility in our business.

The other area would be certainly supporting the marketing support. We're happy to have Margaret Arakawa join as our Chief Marketing Officer, and really building out marketing programs in support of that sales organization to drive that customer growth.

The other area is to continue to invest in R&D to continue to roll out products across the suite of our security products. For example, as the WAF that we just announced earlier this year to provide products a product portfolio that makes it easier for enterprise customers to adopt our products. So really tying together an enterprise sales force that can bring in those customers and a product portfolio that makes it easier to adopt our edge cloud platform.

Frank Louthan

All right. Great. Thank you.

Ron Kisling

Thank you.

Operator

Our next question will come from James Fish with Piper Sandler. Please go ahead.

James Fish

Yes, hey guys. Maybe I just want to build on the last thing you just said, Ron, about kind of new products across security. As you guys are thinking about these further investments, be it organic or inorganic in the security space, are there areas in the portfolio that you think you should be adding to on the security side to be a bit more competitive across the entire portfolio? So getting into kind of secure web proxy and SaaS, for example, makes sense for Fastly, or is this a market that you guys plan on more partnering in.

Joshua Bixby

Yes, it's a great question, Jim. I think what we're hearing from our customers is a real focus on the web and API side of the business. So that's DDoS protection, that's TLS, that's WAF, that's box. And so if you

think, if you look at that portfolio, as Ron said, the launch of the WAF, the next-generation WAF, which is powered by Signal Sciences, is a very powerful story arc. As I mentioned, we have from Fortune 500 down to Fortune 50 customers in, be it financial services or insurance. So we're looking at the ability for the first time to be able to have a WAF that's on-prem, that's in the cloud, which is all connected together. And that's a unique offering and very powerful. We want to keep doubling down on that.

So I think what you're going to see from us is a real focus in '22 on that side, this web API mobile application buyer. And there are a few important investments in that. I think this entire world around TLS and certificates is an important area from a security perspective, bots remains an area that is a very fast-moving area and an area that our customers are really interested in, especially in the financial services side as well as on the retail and e-commerce side. So that's where you're going to see the investment.

I think the move to an IT buyer is our network is really well situated for that. I don't see that as a '22 investment, but it's a very interesting market. And I think whether we go through partners or whether we do it ourselves, that's a question for the future. But right now, we're really focusing in on this web and API buyer.

James Fish

Okay. Makes sense. And not to beat a dead horse here, but on the guide here, Ron, are you taking a different approach to how you're guiding them? The team has historically, and taking more of a kind of haircut or a conservative approach with it as it does imply what we've been talking about here around kind of low double-digit growth for kind of the core delivery business when you look at what Signal Sciences is probably growing. Just trying to get a sense to is this kind of the bottom and we could actually expect beat and raises throughout the year. Thanks guys.

Ron Kisling

Yes. So I don't want to necessarily sort of question exactly the philosophy that my predecessor had. But I think I am taking what I would characterize as a very measured approach to guidance where we have high confidence in the numbers. I think your sort of comment to beat and raise, I think, is more around numbers where I feel comfortable with the numbers in each quarter.

What I would come back to is the guidance reflects at a point in time, the visibility we have into the business. And as we move through the year and we get additional visibility, we will reflect that in the guidance. But I'd come back to saying it's just the visibility that we have into what we see as to the revenue opportunity and growth.

James Fish

Thanks.

Ron Kisling

Thanks.

Operator

Our next question will come from James Breen with William Blair. Please go ahead.

James Breen

Thanks for taking the question. Just around sort of pricing competition. Have you seen anything change in the market over the last quarter? One of your competitors talked about redoing some contracts with some of the large customers in the first half of this year. So do you have anything like that, customer contracts coming up for renewal that may impact growth? Thanks.

Joshua Bixby

Yes, it's a great question. I mean overall, the competitive dynamics have remained similar. As Ron said, we did see a deceleration in pricing compression. And I think that speaks to, in some ways, the supply constraints that were caused after COVID which impacted a variety—all of us, frankly, in some form or another.

I think the other thing is we're seeing a lot more discipline from some of the competitors in this space. We're seeing a renewed focus on ensuring that the business that they do is profitable. And that's good for, I think, for everyone.

We're also seeing, as part of that, an increase in the performance overall in the market. So I feel like we have a market where what's happening is customers are looking—the customers that really matter are valuing performance and reliability and scalability more than ever. And because of that, we sort of have this have and have-not world. There are a few of us that have products which you can deliver to that level. And if you can't deliver to that level, the embarrassment is significant. If you decide that you're going to go stream the Super Bowl or you have got the next launch of a new show, and it fails, it's very visible. We've seen these failures.

And so we're seeing a real change in tune. Now this isn't across all customers. I mean it's important to remember that we are not in the real commoditized segments of the media delivery business. There's a lot of media which doesn't make money, which is struggling to find a business model that makes sense. And that's not the part that we're in. So I do think that there are some vendors that are in the highly commoditized media space, and we can't speak to that. But in the part of the media space that we're in, we're not seeing any change. And actually in the non-media segment, that continues to have incredible pricing dynamics. And it's primarily because there are really only two companies that can serve that big bank, that big insurance company, that big e-commerce site and that changes the dynamics.

So the other part of this, of course, is concentration of contracts, and we don't have that same concentration that others appear to have. We've got renewals coming up all the time. And there's nothing that we see in the Q1 dynamics that we'd call out there.

James Breen

Great. And just a follow-up on expansion on the network side. Some of the OTT shifts, more sites opening internationally outside the U.S. Is there any need to expand geographically with the network that you run over to take advantage of some of that growth?

Joshua Bixby

Yes. I mean the international growth is really impressive. We're seeing that everywhere. The dynamics are really significant. We're actually seeing some of the global providers who traditionally would sort of focus on a language footprint, right. So as you'd work in English-language countries, they're now—that's not the case. So we see media companies and others.

So the demand is high. I think what you're going to see from us is a continued measured pace. We have said all along that if you go look at cities that have 1 million or 2 million people, those should all be

locations that we need to deliver out of. If you look at the number of sites and locations we're in, you will see a very measured approach to that. So you will continue to see us invest. That investment will continue at the pace that we've seen it in the past. We don't see a need to dramatically accelerate it.

But as Ron said, and I think is important in terms of understanding the dynamics of the business, we are making some pretty significant investments in order to change in locations we already exist from a—to a new model of delivery where we're connecting multiple sites together, and that will require us to have some redundancy. We have some sites that are up, the old sites and the new sites, and we'll decommission those over the years. So I do think that's a dynamic that is playing out here. But overall, measured approach with a continued focus on the international markets.

James Breen

Great. Thanks.

Joshua Bixby

Thank you.

Operator

Our next question will come from Will Power with Baird. Please go ahead.

Will Power

Great. Thanks. A couple of questions. Maybe first, just coming back to the cap ex comments. I think you've guided to 12% to 14% of revenue, I think a similar level to last year. I'm just trying to understand how much of that's customer-driven versus getting in front of any potential supply constraints? And I guess really kind of in light of the idea that you should have some efficiency advantages. And I guess the second part of that question would be just trying to understand when we start to see that flow through the cap ex line. Does that start in 2023? Or how to think about that longer term?

Ron Kisling

Yes. So for 2022, we generally expect cap ex as a percent of revenue to be in line with what we've said in the past, that 12% to 14%. And what we see driving is a couple of things. One is I did talk about given the supply constraints, we did make some purchases early. I mean, essentially, what we did to preserve our supply of hardware was take about 18 months of, with normal schedule, sort of compress that into 9 months. So that means a lot of things will be coming online a little bit quicker than we might have otherwise planned out. And that is one of the drivers on some of the gross margin outlook that you see for next year.

But the 12% to 14% does include or reflect that acceleration. I think, certainly, absent that, we'd be at the lower range of that. I think the efficiency that we start to see as we roll out our next-generation architecture is that's largely a rollout in 2022, and we have, as I indicated, some overlap as we make that transition. As we get to the end of the year, some of the older sites will come offline, and we'll start to see really the benefit of those new sites, both from a prospective cap ex, but also just from a cost of operating the network, which should drive some leverage in our gross margins as you get into 2023.

Will Power

Okay. That's helpful. And maybe just a second question. Nice to see the launch of your Next-Generation WAF. Maybe just help us crystallize what really sets it apart versus competitors in the market? And just any early customer feedback, I guess, you might be able to share as you talk to customers about it.

Joshua Bixby

Yes. So the culmination of marrying Signal Sciences and Fastly is important. And I think what's important about it is that Signal Sciences started with the view of trying to find a way to do this differently. These regex-based models were simply not effective, and you see that because many of the WAF—most of the WAFs out there, in some cases some of the vendors, more than 50% aren't actually in blocking mode. So WAFs are out there, and they're just logging bad actors, but they're not actually blocking them. And the reason they're not blocking them is because we do not—historically, this market has had so many false positives i.e., identifying a really good client and either blocking them or somehow obscuring their process.

And if you're a retailer and e-commerce customer of ours, you don't want your good customers blocked at the door and frisked and searched, etc. What Signal Sciences did and what continues to be leading is the fact that the WAFs are in blocking mode because they do not have this false-positive problem that everything else does. So that's a huge difference. So this isn't just a check box to go get PCI compliance. This is real protection in the real world.

The thing about the launch of the Next-Generation WAF powered by Signal Sciences that's unique is our ability to have a WAF everywhere. So what we talked about was the ability to now have the WAF at our edge, but that marries with having an agent in a data center or any other form of deployment. So the flexibility of deployment, as I talked about, one of our customers, the flexibility of deployment is critical. With a lot of these vendors that are going to come and tell you you can either have it in the data center or you can have it in the cloud. You can't have both. And these are different products that are all cobbled together.

So that is a really significant difference. What we're hearing from customers is that the value proposition of actually being effective, the flexibility of deployment, the performance because that's absolutely critical. What you don't want to have is all the security functionality slowing down your website. All of those things with now the new scalability options at our edge, which makes deployment incredibly easy, all of that is unique. And I think that we're hearing from our customers, and you can see from the revenue—continued revenue growth in that segment, just how strong that value proposition is.

Will Power

That's helpful. Thank you.

Joshua Bixby

Thank you.

Operator

Our next question will come from Jeff Van Rhee with Craig Hallum. Please go ahead.

Jeff Van Rhee

Great. Thanks for taking my question. A couple for me. I think, maybe just to start on the revenue front and the expected sequential progression. Obviously, strong outperformance here in the quarter. Any puts and takes in terms of one-timers you'd call out, either are benefiting Q4 or dragging on Q1?

Ron Kisling

Yes, nothing that I would really call out. I think Q4 progressed really in line with kind of what we expected. I think one of the things we talked about, if you look at kind of the—even the impact of the outage, we've seen all the customers come back. They are at significant levels of their previous traffic. We're very happy with kind of where they are. And so I would say it progressed really through kind of broad increase in traffic by some of our largest customers, a lot of traction in the security business through the quarter. And I would say generally in line with kind of how we would expect Q1 to be driven by the same dynamics.

Jeff Van Rhee

Okay, fair. And I think on the gross margin, if I caught it, I think you said 200 basis points headwind for '22. Just correct me if I'm wrong there. But you've called out the timing of investments around cap ex, jamming 18 months into 9. But the other two items you touched on, mix of revenue utilization, what have you seen there and what are you assuming there?

Ron Kisling

Yes. So specifically, we said a couple of hundred basis points. You can interpret that how you'd like. I think the big driver really is less around what you see kind of on the top line of 2022, but more around—a little bit of the cap ex, but more about this investment into our next-generation architecture.

As we expand and roll out these new sites, we continue to incur costs in our existing sites as we run in parallel until the transition is complete. That rollout of the new sites, the sort of decommissioning of the other sites happens largely during 2022. So once we fully transition to these and these old sites are decommissioned, we will start to see reduced cost and gross margin accretion. That likely shows up in 2023. And that's really the dynamic that's driving the gross margins. I think if you look at the normal things that drive it around utilization, certainly the new sites give us additional capacity, but we would expect the drivers really would be on the cost side.

Jeff Van Rhee

Helpful. Two other real quick questions on the numbers side. Sales and sales capacity additions for '22, how do you think about it from a heads or sales capacity additions? And then with the accelerated cap ex, where does that leave network capacity by the end of '22?

Ron Kisling

So two things. I think broadly speaking, as I mentioned earlier, we are looking to invest in sales, particularly really around enterprise sales. We don't have a specific number that we share, but we will be growing that sales team. And we believe that it's really part of that strategy of growing the enterprise customers along with launch of products that make it easier to adopt. And so those two things go together to really drive leverage. On network capacity, I'll let Josh answer that one.

Joshua Bixby

Yes. So Jim, I think on the network capacity side, this is an interesting question because if you look at—we talked about nearly a 200 terabit per second network, which sets us up in this upper echelon, as I

said, which is allowing us to get customers that smaller networks can't. I think that this is more about network utilization than it is about the total number because really what we want to drive up is utilization. And so what you're seeing today, if you go and look, and Fastly publishes this on our network page, you'll see how much traffic is on our network today. At any given moment, it's not 200 terabits per second, right? I mean on a really busy day, you might see us at 50. And so I think what you're going to see with the investments here is less an expansion of that number. Although that number will expand as we go into different geographies. But what you're going to see is our ability to use more of it. And I think that's really the most important measure, and that's hopefully what we're going to see when we see this new architecture come online.

One of the things that we're seeing, and Fastly started with this mentality is that, we can cash the long tail, right? One of the big differences between us and every other vendor in the market is that when a customer comes to us, their cost to go back to their central cloud or their central data center goes down because we're just so much better at the basic job of caching. When you look at what we're doing with these implementations, in this new software-defined architecture, what we're calling CoreFlex, what you'll see is actually how powerful that is and how it dramatically increases our utilization. So I'd look more at utilization. We don't forecast a number, but that's really where I think you're going to see the biggest bang for the buck.

Jeff Van Rhee

That's helpful. Thanks for taking the questions.

Joshua Bixby

Thank you.

Operator

Our next question will come from Fatima Boolani with Citibank. Please go ahead.

Fatima Boolani

Good evening. Thank you for taking my question. Joshua, maybe I'll start with you. Just with respect to the enterprise sales organization build-out and refinement, just on a very high level, what are you doing differently and what exactly doing differently under Brett's (phon) leadership now that he's had a couple of months under his belt. And how should that—any changes that you're making in terms of strategy manifest in the metrics we watch? And then I have a follow-up for Ron.

Joshua Bixby

Yes, Fatima, thank you for the question. I think that there are a few really important dynamics. I think the first dynamic is that what we see is that Fastly historically has not been a partner or channel-based organization. We are changing that. Brett is making a dramatic shift. So one of the things that you're going to see is a significant leverage of the channel. So that's really important. When we look at how historically security has been sold, it's been sold through the channel. What we acquired with Signal Sciences was incredible depth in the channel, and we're going to really bring that to bear, not just on the security, but on that ability to sell delivery, security and compute. So that's one pretty significant change.

I think the other change that we went through and we're going to really see roll out is how we organize our territories and the types of sellers that we have. Because it takes—in order to sell the full edge network, the delivery and the compute and the security, that takes a lot of—takes a different skill set. So you're

going to see—those are two really important dynamics. And I think what you'll—how you'll see that translated is into enterprise customer count. I mean that's one that we have always focused on that I think is important and that we're looking to execute more effectively on in '22.

Fatima Boolani

Fair enough. I appreciate that. Ron, maybe as a segue to you, with respect to some of these changes bearing fruit over the course of 2022, a) how should we triangulate between some of your retention metrics that you shared this quarter and how those retention metrics, or rather what retention levels are embedded in your guidance for 2022? That's it for me. Thank you.

Ron Kisling

Yes. As we spoke about our customer retention rates are very high, and with a churn rate of less than 1%. And we've seen very good customer retention and very low churn rates historically. So as we look to 2022, we look to continue to have really good retention of our customers. And I think the last thing I would say as you look at customers is the other piece is as we have acquired customers, we've seen their revenue grow over time as they move more traffic on to us, as they realize how efficient our network is, how fast our network is and particularly the opportunity to sell in security.

So I think if you look at the dynamics, we're going to continue to see very low churn. I think we're going to continue to see an opportunity to grow business within existing customers. And then a lot of the efforts that Joshua spoke about with the sales team are all about adding new customers into that pipeline. And so those would be the dynamics that are reflected in our outlook for 2022.

Fatima Boolani

Appreciate that. Thank you.

Joshua Bixby

Thank you.

Operator

Our final question will come from Rudy Kessinger with D.A. Davidson. Please go ahead.

Rudy Kessinger

Hey guys. Thanks for taking my questions. On gross margins, I guess, in Q4, just how many sites did you have running with those duplicate costs in Q4? I guess I'm just a bit surprised to see, given the seasonal traffic boost, and obviously, the revenue upside, the gross margins still came down as much as they did in Q3, Q4. So how many of those duplicate sites did you have running in Q4?

Ron Kisling

Well, I think a couple of things I would mention. One of the things in terms of overall sites contributing to our cost is some of the international expansion, where as we've talked about before, we actually bring those online ahead of time, requires us bringing in bandwidth and servers and various—the network ahead of when traffic comes. And secondly, traffic, as we've talked about earlier, the typical pattern is traffic ramps over time. And so you have that investment is driving a lot of that investment.

I think secondly, relative to the investment, I would just characterize it, a handful of sites where we have duplication over the course of the year as we're making this transition to new sites.

Rudy Kessinger

Got it. Last quarter, you gave these longer-term targets. I think it was \$1 billion in revenue by '25. While understanding, and I won't beat a dead horse in the guide for this year, it certainly seems like there's an increased level of embedded conservatism. But going off the 405 midpoint, would take a 35% CAGR from '22 to '25 to hit that \$1 billion revenue target. So do you still feel confident in that target you gave last quarter? And what would you say to investors who are a bit skeptical on your ability to reaccelerate growth that much in the out years?

Joshua Bixby

Yes. I mean I think we remain confident. I think we certainly didn't imply that it was going to happen in a linear fashion. We continue to see and believe that our best path forward here is to guide what we see. And our hope is that we're on this conference call next year, speaking about a really successful year and people see that path. I think we're at a point in our business where we'd really like to just point to the scoreboard after the game is over to see what the score is right now. We continue to feel confident. And we believe with the underlying dynamics in the security business, in the compute business and our continued growth like we saw in the last quarter, we think that all adds.

The other piece here is we have new executives who are all coming in who are extremely experienced, who are also mirroring that confidence. So that's a confidence I have, Ron has and so does the new team. So I guess I would sort of say, I think our best plan is to wait and see how that plays out. We remain confident. Thank you.

Operator

That will conclude today's question-and-answer session. I would now like to turn the call over to CEO, Joshua Bixby.

Joshua Bixby

Thank you. Before we sign off, I want to thank our employees, our customers, our partners and our investors. We remain as committed as ever to fueling and securing digital experiences. And moving forward, we remain focused on execution, bringing lasting growth to our business and delivering value to our shareholders.

We look forward to connecting with many of you and hope to see many of you at the upcoming Morgan Stanley Conference and our Analyst Day in May. Thank you.

Operator

This will conclude today's conference. Thank you for your participation, and you may now disconnect.