Welcome everyone to the very first Snap Inc. investor day! I’m Betsy Frank, Sr. Director of Investor Relations and on behalf of the entire team here at Snap, thank you all so much for joining us today. Over the next few hours, you’ll hear from nine senior leaders here at Snap, starting with our co-founders Evan Spiegel and Bobby Murphy.

We’ve structured the day in two parts: we have five presentations, a 15-minute break, four more presentations, and an analyst Q&A session at the end. Evan will give you more color at the conclusion of his presentation on what each of the speakers will share with you today.

We truly appreciate you all being here today to learn more about Snap and I personally look forward to following up with many of you afterward. The presentations will be posted to our website at the conclusion of today’s event, and the transcripts will follow shortly thereafter.

Before we start, I must let you know that we will be making forward looking statements in today’s presentation so please do take the time to read this disclaimer on the screen. Any statement that refers to expectations, projections, guidance, or other characterizations of future events, including financial projections or future market conditions, is a forward-looking statement based on our assumptions today. Our actual results may differ materially from these forward-looking statements, and we make no obligation to update these statements. For more information about factors that may cause actual results to differ from forward-looking statements, please refer to our filings with the SEC.

Thank you and let’s begin. It is my pleasure to introduce Evan Spiegel.
EVAN SPIEGEL, CO-FOUNDER AND CHIEF EXECUTIVE OFFICER

Welcome and thanks everyone for joining us.

It’s amazing to be here at our first-ever Investor Day, 9 years after our founding. And what a 9 years it’s been. Sitting at my dad’s dining room table all those years ago, Bobby and I could never have imagined creating a business that reaches so many people. Each day, we serve 265 million daily active users and we’ve had a ton of fun transforming the way people live and communicate around the world through our service.

One of the most exciting things about technology is that it fundamentally changes the way we express ourselves. As a child, I remember playing with Kid Pix on our family’s first Macintosh and being captivated by how quickly I could create artwork and then – with the click of a button – start anew. The transformative potential of technology to enrich our lives and support our community has inspired our mission at Snap: to contribute to human progress by empowering people to express themselves, live in the moment, learn about the world, and have fun together.

What the Macintosh and Kid Pix – and eventually Photoshop – did to empower my creativity as a child laid the foundation for what the Snapchat camera is now doing for people around the world. And it’s extraordinary how fast it’s happening. The camera was once a tool for documenting important moments, but it has now become a powerful platform for self-expression and visual communication. There are 5 billion Snaps created each and every day. And because the Snapchat Generation is 150 percent more likely to communicate with pictures rather than words, the camera will become even more central to the way we interact and build relationships with our friends and family.

That is why, over time, the camera has provided opportunities to grow and expand our business. We started with Stories, which helped our community express themselves by sharing pictures and videos from their day with all their Snapchat friends – in chronological order, and without likes or comments. We rejected norms that defined social media at the time and invented new ones that are consistent with our values. This taught us the importance of having a vision and sticking with it. But Stories also showed us that other companies could take our most popular innovations and quickly copy them. This was a meaningful lesson. It fundamentally reshaped how we think about our business and inspired our long-term strategy, which is focused on evolving our new product innovations into scaled platforms that we believe are more defensible.

Now 9 years into our journey, we’ve developed a number of unique platforms. They bring value to our community, and they are also more difficult to replicate. It’s one thing to design an augmented reality lens that pushes the bounds of creativity and enhances self-expression. But we’ve worked to serve a community of independent creators around the world and give them the tools to innovate.
And when we do that, we unleash the power of our platform with over 1.5 million lenses created with Lens Studio, and more than 200 million people engaging with AR every single day.

Our strategy is to take product innovations like augmented reality Lenses and evolve them into platforms by building tools for creators and developers and providing distribution for their creations to reach the Snapchat community. We’ve laid a foundation for this to happen more broadly by organizing our platforms into five main screens of our application: Camera, Map, Chat, Stories, and Spotlight. These are represented in the Action Bar on Snapchat, and I’d like to briefly introduce them.

Snapchat opens to the camera, which we believe represents our greatest opportunity to improve the way people live and communicate. Our camera is used to create Snaps to send to friends or add to Stories; post on our Map; and submit to Spotlight. So our camera is already capable of extraordinary things. But it is augmented reality that is driving our future - a future that Bobby will bring to life in more detail in just a few minutes. In the past few years, our substantial investments against our vision for augmented reality have put us in a position to lead the industry, and we’re doubling down on this strategy in 2021. Augmented reality has evolved from something fun and entertaining into a real utility. Our camera can solve math equations; scan wine labels to find ratings, reviews and prices, tell you the name of the song you’re listening to, and so much more. Last quarter, we signed a partnership to enable more than 200 beauty brands to upload thousands of SKUs to our camera, enabling our community to safely try on and shop for makeup during the global pandemic. And we’ve barely scratched the surface of what’s possible.

Stories is another important platform for Snap. Despite substantial competitive pressure, Stories has become our largest driver of revenue. It’s a place where people share their Snaps with their friends in narrative form and watch content from professional publishers and influencers. We generate the vast majority of our revenue from Snap Ads inserted in between those Stories. And these ads allow our community to take direct actions by swiping or tapping, and they’ve become an important tool for direct response and brand advertisers.

We also see incredible potential for our Communications platform, which lives within the Chat screen and is easily accessible within the Action Bar. This isn’t simply where our community expresses themselves through Snaps and chats. It’s also where we’ve introduced two new offerings: Minis and Games. Minis are a new platform for social experiences. Snapchatters are already meditating together with Headspace and buying movie tickets with a Mini made by Atom. And Games like Ready Chef Go by Mojiworks and Aquapark by Voodoo are enabling friends to play together in real-time, creating more opportunities for meaningful interaction. Minis and Games integrate partners who help our community play, learn, and have fun together, all within Chat - deepening our community’s relationships through shared experience.
We also elevated the Map to make it one of our core screens, and it represents a huge opportunity for our business. More than 250 million Snapchatters engage with our Map each month to find their friends and see what’s happening around the world. But this is only the beginning. We’ve started integrating businesses and schools into the Map, helping our community connect with Places and discover new ones. There are more than 35 million businesses on the Map, and a growing number of small businesses see our Map as a new way to build relationships with our audience.

The Snapchat Generation makes up 40 percent of global consumers and already wields $1 trillion in purchasing power, and they are an important part of the fabric of our local communities. Our community is driving the future of our society, our culture and our economy.

Late last year, we also launched Spotlight, the newest platform on Snapchat. Spotlight empowers members of our community to inspire each other with their creativity and surfaces the most entertaining Snaps while making sure they are consistent with our values. We’ve been overwhelmed by the positive response from our community. Just a few months since launch, we are seeing 175,000 submissions per day with more than 100 million monthly active users. The creative tools in our application unlock new forms of self expression and creativity while also strengthening Spotlight as a growing platform.

The success of our platforms speak to the sustained value we bring to our community. And they also highlight the enormous growth opportunities for our business. In 2020, we generated $2.5 billion in revenue during a challenging year. And we also met our goal of full-year Adjusted EBITDA profitability. What’s most exciting is that we’re positioned to continue our growth well into the future. Our meaningful operating leverage means we can reinvest ambitiously in our products and make big bets on the future of augmented reality.

We believe that AR represents the next major shift in computing, and we’re committed to leading the way. Despite the power of mobile phones, we’re still constrained by the four sides of a small screen. So our team is building towards a future that transforms computing by overlaying computing on the world through wearable technology and empowering new ways of interacting with technology including gestures, speech, and gaze. We’re entering a new era of self-expression and learning that will allow our business to make our most meaningful contribution yet to human progress.

We believe it is crucial for Snap to succeed as a business – not just for the sake of the company, our community and our investors. But because Snap will play an important role in defining the purposes and the practices of the next generation of technology platforms.
As computing becomes even more personal and even more deeply integrated into every aspect of our lives, we believe it is essential that technology and its accompanying business models reflect and enhance our shared humanity and society’s most important values.

What is at stake here is trust, the key ingredient that ties humans and technology together to realize the benefits of technology’s greatest potential. Snap is building a business that will contribute to a more positive vision of the future by empowering and protecting our community, and giving them new ways to have fun, express themselves and to enrich their lives. We have a fantastic team that is deeply committed to making this vision possible, and I’m so excited for you to meet a few of the folks who are driving our progress here at Snap.

Bobby, our Co-Founder, Chief Technology Officer, and dear friend will talk about our camera, augmented reality and the future of computing; he’ll be followed by Jacob, our Vice President of Product, who will talk to you about the products we build and how we turn those into platforms. Peter, our Senior Director of Product, will share how we turn those platforms into businesses that are core to driving our success. And Jeremi, our Chief Business Officer, will share more about our long-term strategy for revenue growth; followed by Kenny, our Chief Marketing Officer, who will share insights into the marketing philosophy powering those efforts. You’ll also get to meet the newest member of our executive leadership team, Ben, our SVP of Content and Partnerships, who will speak about our partner ecosystem. And he’ll be followed by our SVP of Engineering, Jerry, who will highlight our cloud-based infrastructure strategy. And last but not least, our CFO, Derek will talk about our ambitions for long-term value creation. And then I’ll be back with you at the end of the day to answer any questions.

Lastly, I’d just like to say thank you to all of our investors. We’re so grateful for your tremendous support of our community and our long term vision for the future. And we are so thankful to partner with all of you. Have a great day, and I’ll see you a little bit later.
BOBBY MURPHY, CO-FOUNDER AND CHIEF TECHNOLOGY OFFICER

Thanks Evan. It’s great to be with you all today. I’m Bobby and I’m the co-founder and Chief Technology Officer at Snap. I’d like to expand on our vision for the camera and for augmented reality.

Let’s start with the camera.

As powerful and portable as modern computing is, we are constrained in how we engage with it – hunched over, with our fingers tapping and swiping on small screens. Advances in technology will change this, overlaying digital experiences directly in our field of view and empowering us to engage with computing the same way we do as humans, with our heads up, looking out at the world in front of us. Over time, the gap will close between what we are able to see through a screen and what we are able to imagine ourselves and with others.

Our ability as humans to transmit ideas will improve dramatically, with information and entertainment directly in our line of sight.

Our goal as a company is to accelerate the path to this future, by building on what is possible today.

This requires that we reimagine the role of the camera. Historically, cameras were used for documenting moments – capturing a scene exactly as it is, for the purpose of viewing it later in time. Now, through developments in hardware and software, we can do a lot more than just capture a scene – we can understand, interpret, edit, and augment a scene - and not just for later, we are increasingly able to do all of this in real time.

This is the camera that will enable the next generation of computing, and that’s why we are a camera company.

So how do we get to this future?

Well it starts with the Snapchat camera. It is the first thing you see when you open Snapchat and it is used by 265 million people every day to create an average of 5 billion Snaps.

This engagement, which is rooted in visual communication, is the perfect foundation from which we can explore new experiences in the camera. This began with post-capture features like captions-on-images and geofilters, but quickly led to bringing augmented reality into the live camera. We call these lenses. And now more than 200 million people engage with lenses on Snapchat each day. Let’s take a look at how our community is using it.
As you can see, the camera is transforming how we experience the world around us.

Our Augmented Reality platform is driven by three major efforts:

1) Innovating in technology to unlock new capabilities in the camera
2) Exploring creatively to design exciting and informative experiences
3) Supporting a growing community of AR consumers and creators

We’re investing heavily in each of these, with incredibly talented technical and creative teams in which scientists, engineers, designers, and product and community thinkers are working together to invent the future.

When combined with the frequency of engagement we see from Snapchatters with our camera, we have a unique ability to very rapidly develop, design, and deploy AR experiences at tremendous scale. We are able to learn what resonates in AR at what I believe is an unprecedented rate.

Many of the lenses we might consider silly or playful – a vomiting rainbow, a dancing hot dog, or a whale flying through the sky - are really a chance for us to deploy cutting edge tracking or segmentation technology to hundreds of millions of people from which we can immediately learn how to refine our strategy to advance the field of AR.

So, let’s walk through some of the ways we are developing augmented reality together with our community.

Some of our most recognizable lenses have been what we call face lenses. These are lenses based on facial tracking technology that understands the contours of a face and movements like opening the mouth or raising eyebrows. Over the years we have improved the accuracy and robustness of facial tracking to allow AR to stick on the face from wider angles and through faster facial movement.

More recently, we’ve deployed state of the art neural rendering, using generative machine learning, to completely transform faces. This is the technology behind our popular gender and age transformation lenses, our anime lens, our cartoon lens and others. These have become incredible viral hits, driving significant engagement around the world.

Landmarkers, which we released a couple years ago, use public snaps and other images and videos captured in a location to reconstruct physical spaces in 3D - allowing Snapchatters to instantly see augmented reality experiences that are attached to the world with pinpoint precision, like this dragon from Game of Thrones landing on the Flatiron building in New York.
We took this further with Local Lenses, expanding the scale of Landmarkers and combining them with
the same infrastructure that powers Snap Games to enable real-time, shared AR. We showcase this in
City Painter - a lens in which Snapchatters and their friends can virtually paint the buildings on
London’s Carnaby Street.

With Scan, Snapchatters can search lenses based on what is recognized in the camera’s field of view.
This work started years ago with Snapcodes - a convenient way to use our camera to add a friend or
find content - and is quickly growing into the ability to search any visual input to find the best, most
relevant AR experiences. Through integrations with Photomath, PlantSnap, and Vivino, the Snapchat
camera can solve math equations, identify plants, and look up wine reviews.

Each of these efforts represent the early beginnings of much deeper, more powerful technology.
Neural rendering will lead to even more realistic visual transformation, enabling real time high quality
special effects. Landmarkers and Local Lenses are the precursor to large-scale, robust 3D mapping
which will someday allow anyone, anywhere, to engage with AR connected to any physical space.
And Scan is the starting point to bring our vast, growing library of AR experiences not to your
fingertips, but immediately into your line of sight.

We are not alone in our excitement for the future of AR. And it has been especially motivating to see
others - from individual hobbyists to many of the biggest brands - play an increasingly central role in
developing this future.

Three years ago, we began the journey to expand AR on Snapchat into a platform.

This started with the public release of Lens Studio. Lens Studio is the same tool that our own internal
teams use to create and distribute lenses to the entire Snapchat community and with it, anyone in the
world can do the same.

It is remarkably easy to use, with simple templates to get started, yet incredibly powerful, enabling the
development of rich, complex AR experiences. From this simple tool, AR can be deployed seamlessly
to hundreds of millions of people around the world, across thousands of unique device types on
Android and iOS.

The response to Lens Studio has been truly inspiring. There are now over 150,000 creators who have
made over 1.5 million lenses. Best of all, we continue to be amazed by the creative ideas generated
by our community, which is a clear indication that long term success in AR requires a vibrant
ecosystem.
I mentioned earlier that progress in AR depends also on technical advances – advances that enable cameras to understand and change visual input, like recognize a product, identify the edges of a building, or transform surfaces.

These technical advances are driven by machine learning, and as invested as we are in building the highest impact capabilities for AR, this is a huge field across the industry. Individual scientists and engineers, research labs, small and large companies are all every day inventing new ways for computers to interact with the world.

So this past year we released SnapML. This is a first of its kind feature for Lens Studio – empowering creators to bring new ML capabilities into their lenses. We’re tapping into the innovative horsepower of the entire field and already we’ve seen significant growth in the capabilities of our AR platform.

Through SnapML, we integrated partner capabilities like foot tracking, powering compelling virtual try-on experiences like this Gucci shoe lens.

And we’ve seen sophisticated new experiences from creators: James Hurlbut trained an ML model to detect surfboards, developing a lens to rate on key qualities like “shredability.”

And Atit Kharel trained a model to identify and translate 1,000 different objects to Hindi. He’s built several translation lenses now to help Snapchatters learn new languages.

Last year, we announced CameraKit. And with it, we’re expanding the footprint of our platform even further to allow Lens Studio to power AR in applications outside of Snapchat. We’re working with a handful of partners now, with general availability coming soon.

We’re extremely optimistic about all the growing momentum in AR for smartphones. It’s a starting point to imagine AR beyond the phone. To fully realize this idea of computing overlaid directly onto the world will require a new device: a completely new kind of camera that is capable of rendering digital content right in front of us, with the power to instantly and continuously understand the world as our own eyes do, and all in a light, wearable form factor.

Spectacles is our investment in this future. It’s an opportunity to design and develop a device specifically for Augmented Reality.

We’re doing this incrementally, by building and releasing increasingly more capable devices that are connected to the Snap platform. Over time, the same lenses that we’re starting to see on today’s smartphones – lenses that can help you shop new outfits, see your favorite characters come to life, or learn new things about the world – will be able to be experienced in full, immersive 3D.
I hope this is a helpful glimpse into a few of the many things we are doing as a company to push towards this future of the camera. And, I hope this gives you a sense of how all our investments fit together.

Visual communication and the frequency of engagement with the Snapchat camera, allow us to rapidly explore new experiences in the camera. We have sustained fast, organic adoption of augmented reality through lenses, and we are innovating technically and creatively, leveraging the insights from this scale of adoption. From this we are supporting a growing ecosystem, with new and existing businesses finding more and more value in AR.

And through all of this, our pace of execution and our pace of learning continue to accelerate.

Augmented reality represents a shift in our ability as humans to transmit ideas. It allows us to render digital experiences directly into physical space and to use the camera as an input to access information and content far faster than keyboards can ever allow.

We have already seen remarkable momentum across the Snap ecosystem. In the coming years we will further develop our platform, growing in our capacity to provide tools, services, and distribution to accelerate broad adoption of AR, on and off Snapchat.

Most importantly, our team is incredible. It is made up of some of the most brilliant and imaginative minds in the world, who are passionate about augmented reality and together with our community, inspire us to keep inventing.

Now I want to turn it over to Jacob to speak about the other services we offer in Snapchat, and how they connect to the camera. It was great to speak with you all. Thank you.
JACOB ANDREOU, VICE PRESIDENT OF PRODUCT

It's great to be here with all of you today. My name is Jacob, and I believe the best Stories are chronological, so I'd like to take this opportunity to start with the origins of Snap's product philosophy. Over the last 6 years we have taken our product DNA and evolved an approach that has fueled innovation and unlocked growth.

From day one the product culture at Snap has been one of empathy. Understanding our community, building for their needs and doing the right thing, were practices that allowed us to identify opportunities and invent entirely new solutions. Empathy in this initial stage led to a series of critical innovations.

When Evan and Bobby first set out to create a faster way to communicate, they realized that people had been drawn to text messaging for its asynchronicity, or the ability to chat back and forth at your own pace. But along the way texting sacrificed the richness and expressiveness only found in face-to-face communication. Texting was simple, fast, and functional – great characteristics of a transactionally-focused communication platform, but hardly the right medium for close friends to create an emotional connection digitally. Voice-calling provided a bit more emotion but required synchronicity and lacked the context of a visual element. Evan and Bobby quickly realized the power of the camera and visual communication. Snapping, or talking with pictures, was born out of these realizations, with its origins in Evan and Bobby's empathy and observations of the world around them. The key to this realization was incorporating the camera as a communication medium rather than a tool to archive and preserve memories. The combination of a communication-focused camera with ephemeral Snaps let our community use the camera as a natural extension of their conversations.

Today, we are using this foundation to build the world's leading platform for communication with real friends. Communicating between real friends is not only something that Snapchat is uniquely positioned to serve, but is also the most frequent and meaningful type of communication. Our communication platform is a core driver of retention for our service and the engine that brings people back multiple times each day. In the last year, we've made foundational improvements to performance to make communication even faster by rewriting and regionalizing critical parts of our backend infrastructure.

Years ago while listening to our community we were inundated with requests for a “Send to All” button, but we knew this idea had issues. Being able to send a Snap to everyone at once would devalue receiving one, and risk the service becoming spam-ridden if people were sending Snaps to all of their friends all of the time. But Snapchatters wanted an easy way to communicate with all their friends at once. As we studied the landscape, we were confused by the reverse-chronology and permanence of the existing forms of one-to-many sharing. This kernel of an exploration grew into
Stories, the revolutionary format used by billions of people around the world across major digital platforms.

Today, Snapchatters post stories to share their lives with trusted circles, and watch stories to catch up with the day-to-day lives of their friends. Friend Stories are the second key pillar of engagement and retention, a strong foundation for our monetization of Snapchat with our advertising partners.

Since launch, we’ve augmented Friend Stories with Discover which offers curated, professional content designed for our mobile-first audience. Within Discover, we hand-select partners that deliver news and entertainment to our community across Publisher Stories and Shows. Our editorial selectivity and curated approach has helped us bring brand safe, best-in-class mobile content to our community that is accurate, timely, and topical. Ben will spend a little more time on Discover later in the day.

When we invented Stories, our community at the time was small and young, much like our company. Stories and Snaps were changing the world and driving global growth. Our growing global community meant that we needed to expand our thinking and create new tools to build empathy with a diverse world-wide audience.

From this need, we created our Growth approach. We did not replace human-centered design with a relentless data-driven culture, like we’ve seen in our peer companies. Instead, we established a data-informed approach that allows us to retain our DNA of innovation with the valuable augmentation of data. This data-informed method drives both growth and innovation.

The way we build products and grow products today is centered around delivering value to our community. This is in contrast to many other companies who primarily focus on driving behavior. Behavior is easily measured with metrics and it is often assumed that users spending more time or opening an app more often is universally good, or even beneficial for a company. This mindset makes two very important things difficult; virtuosity and innovation.

There are many non-virtuous ways to drive app opens and time spent that do not result in customer value, therefore undermining long-term engagement and retention. Not all engagement is good engagement. To avoid this trap, our product processes are built specifically to deliver value to our community through all the products we offer, and not to drive short-term behavior.

Over the last 5 years, our community has told us that they use Snapchat because it’s the fastest way to communicate with the people they care most about. Whether they are Snapping or posting Stories, our community loves how our camera, creative tools, and augmented reality make communicating information and emotion even faster and easier.
This Core Product Value has been our primary focus in driving growth across all teams at Snap. Our Core Product Value orientation has driven improvements in areas like performance, new user friending, and self expression, all of which drive meaningful and compounding improvements to top-line growth. The progress that we’ve made in these areas serve as strong validation that focusing on product value and not behavior, delivers impactful improvements that meaningfully drive measurable growth.

Our approach oriented around product value also protects and deepens Snap’s DNA of innovation. When the empathy gap grows, as new products and companies scale, many choose to abandon the early stage approach of design-driven product innovation, in favor of a highly iterative data-driven approach that leaves little room for both risk and innovation.

At Snap, we refused to abandon our core of human-centered design and culture of innovation. Instead, we’ve built tools and mechanisms to minimize risk as we scaled, improving our innovation success rate through our data-informed approach.

This approach is evidenced with our Map, which is used by over 250 Million Snapchatters each month to keep up with friends and share what they are up to. On other platforms, everyone sees the same Map. But on Snapchat we are building the world’s most personal Map. Your Snap Map reflects your world; it features the people, places, and activities you care about, and no two are the same.

The Map is built to see where your friends are and what they’re up to quickly and easily. This kind of sharing is at it’s best with close friends, a perfect fit for the best friends network that is unique to Snapchat. The version of the map in our app today is one that has been relentlessly improved in conversation with our community over the last two years leveraging this data-informed approach.

To build innovative products like this, we leverage User Research and the work of our Sociology team. Together these teams create hypotheses that we then validate and size with the help of our Data Science teams.

These hypotheses go on to form problem statements, and this is where the human-centered design process begins. With our design approach, we value our community to help us identify the biggest problems and opportunities, but we critically rely on the Design Process to create the most innovative solutions.

One of these opportunities was realized in Spotlight. Launched three months ago, Spotlight shines a light on the most entertaining Snaps created by the Snapchat community – which has always told us that they loved our camera and creative tools, but had to post to other platforms to find an audience.
We set out to build Spotlight as a place directly within Snapchat that allows anyone to reach a massive audience if they make a great Snap.

We also designed Spotlight with our long held values at its core - it doesn’t feature public comments, and all profiles are private by default. All content on Spotlight is moderated through automation and human review before it's widely distributed, a critical aspect of living up to the high expectations of both our community and our advertising partners. With Spotlight, we didn’t stop at democratizing creativity and distribution, we also democratized the creator economy with our incentive program where anyone can earn. Ben will touch more on this later today.

By building a product culture focused on value delivery, we have found a reliable way to drive top line growth and innovation simultaneously. We have proven the success of this approach as we evolved each of our products into the five scaled platforms on Snapchat: Map, Communication, Camera, Stories, and Spotlight.

Each of these platforms were built with three distinct values – first, having a deep respect for our community’s safety and privacy; second, creating experiences that contribute to their wellbeing and happiness; and third, enabling them to experience the world with their friends in new and exciting ways that make a positive impact. Our content products will continue to deliver increasing user and advertiser value, and in the future we continue to invest in the platform evolution of our Map and Communication products.

The Map started with friends and now we’ve added Places. For our community, local businesses are places to meet, hang out, and create - they form a key part of our relationships with each other and the world around us. For local businesses, this home on Snapchat will give them new ways to reach our community. We have already added 35 million businesses, and we’re creating opportunities through integrations with food delivery partners like Uber Eats, DoorDash, and Grubhub and reservations with OpenTable. Soon you will be able to find your favorite places and discover new ones on the Snap Map. The product becomes even more personal as our community continues to interact with the world around them.

When thinking about the future of our communication platform, the only thing best friends do more than talk is hang out. Over the last 2 years we’ve invested in new ways for friends to spend time together inside of Snapchat, right from the Chat tab where they’re already communicating. In 2019, we started with Snap Games, and today over 30 Million Snapchatters play games each month. With Snap Games, Snapchatters can play together at the same time, even when they are apart.

Snapchatters and developers love Snap Games, and this is just the beginning. New game titles, styles, and genres are next, engaging an ever larger audience and a wider range of developers.
Last year we extended this investment in shared experiences beyond Games with Minis. Minis are bite-sized utilities that friends can use together, directly inside of Snapchat. They load instantly, require no registration or personal information, and make coordinating between friends faster than ever.

With Minis, we’re currently working with a small group of partners to get the experience right, similar to our approach we used to grow Discover. But early indications have been exciting. For the 2020 election we partnered with the non-partisan organization, Democracy Works. Through their Mini we were able to help over 1 million US Snapchatters register to vote, view a sample ballot, and Snap their friends about registering. Since elections occur infrequently, registering to vote is a great example of an experience that makes more sense as a Mini compared to a space-consuming ever-present mobile app.

As we look into the future, our Map and Communication products will continue to bring people together - on and off platform - helping them feel even closer to the world around them and the people they care most about.

Our values-based approach to design and our relentless focus on delivering Core Product Value has been the engine that has powered our growth to more than 265 million daily active users. In conjunction with network effects, this approach provides compounding value that we believe will continue to accelerate the growth that we have experienced in the past few years.

Creating the easiest and fastest way to communicate transcends borders and ages - while the number of friends, substance of conversations, or amount of time our community dedicates to friendships may differ by region, age, and lifestyle, the need to develop and maintain close friendships is universal. As we have extended our empathetic approach to growth into new regions and demographics, we have found that our core product value resonates globally. While there will always be work required to ensure Snapchat feels made for each of our customers, we have not felt the need to reinvent ourselves fundamentally with every new challenge. Accelerating growth into new regions requires us to ensure that the key elements of each platform feel native to new communities, rather than creating an entirely new product. This allows us to work relentlessly on establishing the pre-conditions, like connectivity, and performance, setting the stage to quickly adapt and grow into new markets.

A great example of our work is in India. We have seen accelerating growth in the region with our community doubling in size in the past year. Much of this growth came from demonstrating our core product value to the Indian community while taking efforts to ensure that Snapchat feels made for our community there. We took obvious steps like hiring local designers to ensure our creative tools and AR reflect local culture, and partnered with local content producers and creators, added nine new
languages, and more. But we went even deeper to develop an empathic and data-informed approach including in-market research studies, launching programs with local high schools to deeply understand communication behaviors of our core demographic, recreating the network environments in our labs to better develop for the local connectivity, and refocusing our team to improve the Android experience which is much more prevalent in our less penetrated markets. We worked on performance of the network and app alongside deep localization to make Snapchat feel “made for me” no matter where in India you were. When this foundation was laid, we saw growth in India accelerate, a clear demonstration of the fundamentals broadly applicable to many markets beyond India.

Importantly, our efforts in India and other markets were focused on enhancing the existing value of our five platforms rather than needing to create new value through new features or products specific to a market. Having a universal set of values at our core and a clear path to making them accessible to new cohorts and markets, ensures that our growth is scalable and repeatable. And while many have tried to recreate the value of Snapchat by copying certain features, we continue to see our value remain differentiated and communities adopt Snapchat as the best way to live in the moment and share experiences with their closest friends. Since the first quarter of 2019, we have doubled the size of our daily active community outside of North America and Europe with year-over-year growth rates accelerating as we increase penetration and see our communities engage with our Core Product Value.

To close, we believe that the best way to build a business in the long-term is to remain focused on delivering value to our community, partners, and advertisers. For Snapchatters, that means improving their lives each time they use our service to connect with their friends or learn about the world. For partners and advertisers, we will continue to build new products and platforms to provide reach and distribution to our unique and unduplicated audience. All of this is done in concert with our values around empathy, and through human-centered design. We believe this approach is critical in fostering a durable relationship with our community and our partners. This approach has guided us well thus far, and will continue to serve as our compass for years to come.

I’m thrilled to introduce you now to Peter Sellis. He’ll take this Product story a step further and share how we’re turning these platforms into businesses.
PETER SELLIS, SENIOR DIRECTOR, PRODUCT

Jacob just spent a lot of time giving you an overview of how we build our products. Well at the end of the day, I think somebody needs to figure out how we can make money off those - and that’s why I’m here. My name is Peter and my team works to evolve our platforms into businesses.

Our long term vision is that each of the five platforms will generate revenue proportional to the value that they provide our community.

Via the work on our self-serve ad platform, we’re in a position to drive multiple years of 50 percent plus revenue growth. This was not easy. I’m going to outline how we did that, the struggles we faced, and how overcoming them has created a resilient business.

Let’s go back to 2015 and 2016. We focused on bringing mobile-native formats to market, starting with vertical video. We helped advertisers pivot from desktop, landscape video to mobile, by offering the first full screen vertical format at scale. This format is now widely considered an industry standard.

At the same time, we also launched the world’s first camera advertising at scale, with Lenses and Filters. As you probably remember, these captured the imagination of our audience and advertisers alike. And this really harkened to our unique advantage – that Snap wasn’t just mobile-first, it was mobile-only - this was the sole major social platform for which that was true. And it allowed us to pioneer many of the ad formats that are just now coming to market on other platforms.

But there was a problem with this approach: custom formats such as vertical video meant that advertisers have to spend a lot of money and time on creative. This, in turn, meant that the campaigns had to be expensive and broadly targeted to justify that time and money. This made those campaigns inaccessible to almost anyone except the largest, global brands. And even for those, they were inefficient due to their broad targeting and slow turnaround.

So we worked to change that. In 2017 we launched our Self-Service platform, called Ads Manager. Over the next few years, we worked tirelessly to make this tool best-in-class - competitive with the largest digital ad platforms out there. We shifted our buy model from expensive, emailed, pdf insertion orders to an efficient, bidded, performance-driven marketplace.

We rapidly expanded from two bidding outcomes – which we call goal-based bidding – to over a dozen options. These include options such as app install and pixel purchase. And then we relentlessly responded to customer needs particularly around targeting, optimization, and insights. We introduced features such as day-parting, accelerated bidding, and audience insights.
But again, we encountered a challenge. This rapid shift to self-serve eroded yield. In fact, over the course of two years we went from approximately 90 percent Managed to 90 percent Self-Serve. And during this time, we reported consistently decreasing CPMs. These lower prices absolutely benefited our advertisers, but they were disruptive to our revenue growth trajectory in the short-term.

So next, we invested aggressively in optimization, measurement, and ad ranking in particular. We set out to build the best ad ranking team in the industry, focused on driving measurable advertiser outcomes more efficiently. In this way, we could actually increase CPM and increase ROI in parallel.

This phenomenon is at the core of what is a somewhat counter-intuitive flywheel that I think is actually really important, so I want to focus on it. The flywheel means that more demand can also mean more efficient outcomes. As you’ll see in the diagram, the more advertisers we have – the more diverse the set of ads that we can show – that makes these ads more relevant – and it makes Snapchatters more likely to engage with them – this, in turn, drives higher ROI and makes us more efficient with our inventory – so we can end up supporting more demand in the first place.

A great example of this is actually something that Derek talked about on our last earnings call. He talked about the idea that effective CPMs for inventory that were monetized via Pixel Purchases had risen 41 percent sequentially in Q4 - the cost of those Pixel Purchases, however, had actually decreased 11 percent over the same time period. That is the power of better ranking, better optimization, and growing demand in action.

But there was a new challenge, there kind of always is if you’re not getting the theme yet. This unabated pursuit of performance-oriented advertising was implicitly biased towards direct response. The engaging formats that captured the imagination of brand advertisers in 2015 and 2016 – they didn’t fit neatly into a biddable auction-based environment. By the start of 2020, the majority of our revenue was DR, and camera advertising growth had actually slowed.

However, we knew we could solve problems like this. Today, every great advertiser is a performance advertiser - brand or direct response - it’s just a different time horizon. The best advertising appeals as much to the CFO as it does to the CMO - meaning, it’s an essential investment in the future of a business. Brand advertising is absolutely the cornerstone of this.

Therefore, we envisioned a set of self-serve tools designed with brand buyers in mind, where planning, predictability, transparency are all critical. We started this journey with Reach & Frequency, which allows advertisers to reserve campaigns at a fixed price.
We also then brought one of our more successful offerings, Snap Select, to our self-serve environment - but we only opened it to our best partners. It allows for reserved, pre-packaged Discover buys of our best content.

And then most recently, we launched First Commercial, which - again, exclusively for our best partners, but still built into our self-serve tools - allows brands to reserve the first Commercial that a Snapchatter sees in a given day.

So at the end of all of this, where did we end up? Well, our ad stack is one of the most full-featured and advanced on the market for both brand and direct response. Our team remains uncompromisingly focused on building a platform that works for advertisers of all types and all sizes.

This work has set the foundation for a future with significant opportunity to grow in video. As advertisers utilize our full suite of goal-based bidding options, we can translate investments in machine learning directly into revenue gains. Furthermore, Friend Stories and Discover are still nascent within many markets - and even within some of the cohorts of our developed markets. This leaves us ample potential. New areas, such as Spotlight, can be immediately additive due to the flexible, fungible nature of our demand, and our modular tools. And then finally, our business is still very early in many valuable advertising markets worldwide, and Jeremi is going to talk a little bit later about exactly this.

We also have untapped potential within our service to grow ARPU. Our team will focus next on the Camera - via AR Advertising.

We’re going to do this by, first - building the core behavior of AR as a utility. Then second - making it easier for brands to create and experiment, and then third - we’ll pair it seamlessly with our powerful advertising platform.

We are investing in building new experiences for specific verticals where we believe AR can clearly augment the customer journey and provide value to businesses. We’re going to start with shopping. We’ve already partnered with several leading brands to leverage our technology for virtual try-on experiences.

Through our recent beta program with over 30 brands across verticals from beauty to auto, Snapchatters tried on products over 250 million times. These same Snapchatters were 2.4 times more likely to click to purchase than average.

Next, we’re making it easier for businesses to create, publish, and share Lenses with millions of Snapchatters. We’re going to do this by connecting all the innovation that Bobby talked about in Lens
Studio with our advertising platform. For example, when we launched Snap ML last year at our Partner Summit, it allowed developers to add their own machine learning models to Lens Studio. One of these partners brought a shoe try on model. Dior then leveraged this try on model to create a try on experience. This experience lives permanently on their brand profile.

So finally, we’re going to invest in the optimization algorithms to serve AR to Snapchatters who are most likely to meet a brand’s objective. So back to Dior, who can take those shoes from their brand profile, and create an optimized ad campaign with them. We’re going to connect the same buying experience to AR that we have for Video, and the best part about this is that the formats actually are proven to work better together.

Now, let’s move on to the Map where – as many of you have noted repeatedly - we have a large, untapped opportunity. Local, digital advertising is an established market - it has a playbook, and we’re confident that this will be an important part of our business in the future. But we want to do it right.

Local businesses are considered the backbone of the economy. We launched our first offering, Promote Local Place, alongside the addition of Place Listings as part of our response to helping SMBs through the pandemic. This was the first time that businesses were on the Map. It included a dedicated buy flow that directs Snapchatters to a Place listing on the Map - along with new targeting and measurement options. We’re going to spend a lot of time expanding these products to work for the largest multi-location enterprises in 2021, but they were honestly reactive to the pandemic, and we feel that we have yet to truly build on the potential of the Map.

As Jacob mentioned, our first step will be adding more value to Place listings. Local businesses are a really important part of meeting up with your friends in real life. And that was something that Jacob talked about that really resonated with me. Because Snapchatters who use the Map have location services enabled, we’ll actually be able to accurately measure and drive store visits, closing the loop with our own first-party data. But small businesses are time and resource constrained. It’s often the same person serving the coffee that’s buying the ads. Building a product that ‘just works’ is important. That’s why we’ll continue to add value to Places - which Snapchatters already check-in to millions of times per day. When we do eventually allow claiming, local businesses will have a huge engagement pool to tap into and leverage.

Finally, let’s talk about our Communications platform, which includes two of our most recent product offerings: Games and Minis.

We’re actually starting to see some really exciting early traction with games. Game developers are starting to generate revenue on Snap. Today, we offer rewarded Commercials, which is our six-
second forced-view ad, within Games, giving partners a familiar way to monetize engagement. We have been working hard with developers to find financial success on the platform, and we were able to more than double revenue year-over-year for them in Q4.

We also recently launched a beta product on Android called Snap Tokens. It’s a digital good which will give developers more options. Our goal here is to experiment with, and encourage, direct user monetization, and we may expand this beyond just Games.

Now, building off the same technical architecture of Games, Minis are less than a year old, but they present a clear opportunity for businesses to build on-platform experiences. These experiences will leverage the friends-first nature of Snapchat and the best features of our partners’ products – all within Chat.

While we tested some initial shared experiences over the past year – such as schedule planning, meditation, events – we are gradually expanding our partners to include use cases such as commerce.

If we are successful here, Minis will generate significant value for our partners, and we’ll be able to optimize the full funnel – from discovery to action – unlocking again on-platform conversions. Over the coming years, you’ll see us continue to add to the organic value that businesses can derive from our audience and our tools, and we will try and tie all of it back to their brand profile.

Taking a step back, we believe that we are doing our best work when monetization products act as a complement to our service, bringing businesses to our community in an additive fashion.

Our team has built a strong base with our self-serve platform, expanding it into premium video, and now the most advanced AR advertising stack. Still, we actually have significant head room within video alone, which allows us to carefully and thoughtfully expand our business to each of the five screens in a symbiotic way, augmenting advertising with other solutions as necessary.

Given our growing audience and strong engagement, we expect to meet this challenge as we have in the past, head on. Now here’s my good friend Jeremi to talk more about how our team and go-to-market strategy are set up to increase revenue over the long-term. Thanks for listening.
Thanks, Peter. Hello! You’ve met some new folks at Snap today, but I’m guessing my voice might be familiar. I’ve spoken to many of you on our earnings calls over the last two years. But each time it feels like we’re only scratching the surface. The questions go by so quickly - even when you ask two instead of just the one you’re supposed to ask – but today feels really exciting because you get to hear the whole story, from a variety of angles. If we’ve not yet met, I’m Jeremi Gorman, Chief Business Officer here at Snap - and I am responsible for Revenue and Customer Operations.

Put very simply: we have a long runway ahead of us. Our audience is growing, and it’s hard to reach on other large platforms. We have pioneered the most innovative ad products - our vertical video and augmented reality formats are poised for robust growth in advertiser demand.

Today, we comprise less than 2 percent of the US digital ad market. That number is at odds with the fact that we reach nearly half of US smartphone users, which not only highlights the opportunity, but forces us to think, how high is up?

We have made deliberate strategic decisions to put ourselves at the center of industry momentum and trends and, in many cases, pioneered them ourselves.

The US digital ad market is incredibly large at $142 billion today and it’s growing. eMarketer estimates that it will grow at an average of 14 percent a year through 2024. Part of this growth is coming from the US $60 billion linear TV market. These trends are very favorable for domestic digital video ads, which are just one component - but an important component - of our strategy. We are creating and defining a new market in augmented reality, and we’re laying the groundwork to bring small and medium sized businesses onto Snapchat. We are also expanding into the $340 billion global digital ad market.

And in addition, self-serve advertising - the core of our offering since 2018 - will make up nearly 90 percent of all digital display ad spend by 2022, accounting for essentially all the growth in the space. Mobile advertising is expected to grow faster than desktop advertising, video advertising is expected to grow faster than non-video advertising, and AR and premium mobile content are two of the most talked-about focus areas for marketers. So again, we are in the center of all of this growth and innovation.

Given our growing community, their engagement, and success in major advertising markets, we believe that we can continue to grow revenue at high rates for years to come.
There is no person at Snap with whom I work more closely than Peter Sellis, who you just met. Sales Leadership and Revenue Product are joined at the hip, listening to the market and developing products to solve advertiser problems. Our partners see advertising as a business investment. Every dollar spent is becoming more performance-oriented, leading to increased use of self-serve tools and advanced measurement capabilities.

Roughly two years ago we transitioned from a regionalized to a verticalized sales structure. We believed that, as we scaled, we could service more advertisers with relevant categorical experts from our team. Prior to this reorganization, a seller in the Midwest could serve McDonalds, Sprint, Target, and Coca Cola. I actually think that was a real client list! They weren’t even on the same team as the seller on the West Coast who had T-Mobile, Taco Bell, GAP, and Red Bull. That was suboptimal for our clients because we weren’t providing them with the expert level service they deserve. It wasn’t great for our teams because their attention was divided, and it wasn’t great for Snap, because there wasn’t a mechanism to get best practices by industry type easily from one team to another. Now, all Telco Account Executives are on the same team, all Restaurant AEs are on the same team and so on and so forth. We aim to be expert business partners to our advertisers, solving problems with them and deeply understanding their businesses.

We have three major types of advertisers that we service: large brands – which we call Enterprise; direct response – or performance advertisers – which is our Emerging team; and small and medium sized businesses, which is our Scaled Services team. Overlaying this structure is our Agency Development team. So let’s dive into each of these advertiser segments.

We have large brands – the Enterprise team. This is the first set of customers we partner with – large brand advertisers with complex buying structures. This is where our teams are categorized by advertiser vertical.

We have long standing relationships with most of the Comscore 1,000, including Verizon, Walmart, Ralph Lauren, P&G, Taco Bell, Coca-Cola, and Playstation, to name a few. To connect these advertisers with our audience in a measurable way, we’ve developed an increasingly sophisticated suite of ad products and measurement tools that allow them to drive and reach ROI.

When you consider what happens in a person’s life between the ages of 13 and 34 – the Snapchat Generation – you understand why large brand advertisers find deep, long-term value in our audience. In this age range, they move out of the house for the first time, they get their first apartment, they get their first credit card, they get their first car, they take their first trip on their own, and they start to buy the day-to-day products that they will be loyal to for the rest of their lives.
In addition, they have tremendous influence over household purchases. A recent study found that over 80 percent of parents of Gen Z report that this generation influences household spend. Let’s talk about that in practical terms. What does influence over household spend mean? Alright, I know we’re all virtual here, but raise your hand if you have a gaming console at your house. Xbox, PlayStation. I feel pretty confident that I could look you in the eye and say you might have made the purchase, but it was probably your teenager or college-aged person who chose between Xbox and PlayStation. And that’s what we mean by household influence. Now multiply that by 80 percent of parents saying that their kids helped them make those decisions and you can see why large brand advertisers would want to get in with the Snapchat Generation now. Building brand awareness with them and favorability now is critical.

Larger brands utilize both video ad units and Sponsored Augmented Reality Lenses. They invest in our video advertising through Commercials and Snap Select, which enables them to buy six-second non-skippable video ads in a pre-packaged, fixed priced, premium inventory environment within our hand-curated Discover section. We also offer bidding capabilities that allow larger brands to optimize their campaigns for specific goals: swipes, video views, long form views, First Commercial, and more.

Our unique and innovative AR Lenses give our team a huge opportunity to attract larger brand advertisers. In the past, these brands used augmented reality for brand moments to drive awareness and reach through expensive one-day takeover Lenses. But today, brands are utilizing augmented reality to drive real, measured business results. Over the next few years, we believe our AR capabilities will become the next industry standard for mobile-native advertising.

We have already partnered with several leading brands to leverage our AR and ML technologies to power virtual storefronts and try-on experiences, such as Champs, Clearly, Dior, Essie, Kohl’s, Levi’s, Jordan brand, Sally Hansen, and Gucci, just to name a few.

The challenge with AR, which is different from our existing video ads business, is that we are still in the early stages of development of the AR industry in its entirety: there are not often existing augmented reality budgets at these large agencies or within the brands. However, I’ve been in this industry a long time, and I remember when there weren’t distinct Mobile budgets, video budgets, social budgets, or ecommerce budgets either. But here we are, in a place where those are core disciplines at each brand and each agency. So too, will be augmented reality. But, it requires a platform in a leadership position to push that opportunity, and Snapchat is that platform for augmented reality. As such, we are investing to build the industry, and we’ve done it before, with vertical video, with the Stories format, and now you’re going to see us do it with augmented reality advertising.

As Peter briefly mentioned earlier, we recently launched Brand Profiles, which offer a permanent home for large brands on Snapchat, built around their unique investments in the app – starting with
AR Lenses, native commerce stores, and content highlights. Brand Profiles bring these various brand experiences for Snapchatters together into a single home on our service.

Ultimately, our customers are the judge of our offering. Here’s what one of our large brand advertisers – Universal Pictures – had to say about working with Snapchat.

The next set of advertisers that we partner with are direct response advertisers – or our Emerging customers. They largely comprise app install and direct-to-consumer brands, and the sellers on this team are experts on driving to performance objectives at scale. This category has found success on our platform as we have evolved our ad tech stack, and is largely responsible for our “always on” budgets. Direct response makes up more than half of our total revenue now.

Advertisers in this set include FanDuel, HiSmile, eBay, GOAT, Starling Bank, and more.

The expectation here is that they put a dollar in, and they expect more than a dollar out in the form of an app download, an eCommerce purchase, or a subscribing customer.

These advertisers love the scale of our audience, the depth of their engagement, and most importantly, the sophistication of our self-serve ad platform. Our investments in our self-serve Ads Manager were a catalyst for success here, and at the highest level we are now at feature parity with all other larger platforms. All of the lower funnel bidding capabilities that we now offer, like optimizing for a pixel purchase or a subscription, make it incredibly easy for an advertiser to create and launch a high-impact campaign.

Our ad formats allow them to tell rich stories in formats that Snapchatters love, and it’s easy for them to direct Snapchatters to an actual purchase. Dynamic Ads were one of our fastest growing product categories, with a significant increase in advertiser adoption year-over-year in Q4 serving a broad range of verticals and scenarios.

As Peter mentioned, we are also turning augmented reality into an accessible, easy to buy, and easy to create ROI-based product. Advertisers can now optimize AR campaigns for Clicks, Shares, Purchases, and more.

We believe that the most fundamental, reliable investment we can make to onboard new advertisers is in machine learning – we’re going to drive ranking, measurement, and optimization to advance our ads.

Here’s a proof point from a direct response advertiser – HiSmile – about the success that they’ve had on Snapchat.
The third set of customers with whom we partner are Small and Medium businesses, and local advertisers. We believe there are millions more advertisers in this category for whom Snap can help achieve their business goals.

Our Map will play a key role in onboarding local businesses. And again, as Peter mentioned earlier, we have a tremendous opportunity to help brick and mortar small businesses accelerate out of the lockdowns of COVID and engage with the group many expect to emerge most enthusiastically from lockdown: the Snapchat Generation. We’ll go back to those teenagers and college students that you have. How many of them are waiting to run out the doors? They’ll be the first ones to the movies, they’ll be the first ones on cruise ships, they’ll be the first ones on planes, they’ll be the first ones at restaurants. They can’t wait to get back together with their friends. And when they do, the Snap Map is here for them. To contextualize, the Snap Map is incredibly popular amongst Gen Z and Millennials. This generation isn’t looking for a way to get from point A to point B - it’s not super hard to not get lost in their hometown or college town. But they do very much care where their friends are, they care where the gatherings are, they care who’s at the concerts, they care who’s at the bar, they care who’s at the restaurant, and they care what the hottest new venues in town are. That’s the Snap Map. It’s highly personal and highly engaging.

We’re investing here with a dedicated team to help on-board these advertisers, with one-to-many and one-to-one targeted outreach. In each quarter in 2020, we achieved new record numbers of advertisers, and we see the opportunity to continue that trend long into the future.

Now let’s take a look at what one of the small businesses with whom we worked had to say.

The last set of customers with whom we partner are large global agencies, who represent the biggest brands in the world. We have deep relationships with the Global Holding Companies and key Independent Agencies that create and drive successful Snapchat campaigns for their clients.

In 2020, we relaunched our Agency Certification training program to bring hands-on training across several agency disciplines, including Social, Creative, Video, and Planning. We also provide insights to help agencies deeply understand the Snapchat Generation during their strategic planning, and recently launched a “Snap Champions” program for creatives within agencies who we’ve trained as experts on Snapchat AR.

Ultimately this type of outreach and sales structure is critical to fostering relationships with large brands, direct response advertisers, local businesses, and large global agencies.
And I would be remiss if I didn’t provide you with some customer feedback. So here you see a testimonial from one of the world’s largest agencies, Publicis.

I also want to touch on how we approach our monetization strategy globally as we grow in new markets.

Before we invest in an emerging market, we first focus on building a sufficient base of daily active users. Then, for in-country monetization, we start with bringing in non-local, or “export advertisers” who may find this new market attractive. An example of this would be an advertiser in the UK wanting their products to resonate with our new and growing user base in India. We then augment those efforts with a local, certified third-party reseller - one or more in multiple markets - and we truly view them as an extension of the Snap team. Their offices look Snappy, they wear our shirts, and they represent our brand and market - we manage them very closely. And then, as DAU, engagement and revenue grow, we transition the sales responsibility more towards in-house, direct sales teams. We have a structured approach for evaluating expansion markets on which we focus to ensure we’re applying the right level of resources to the right opportunities. We believe we have a huge opportunity to increase monetization internationally as we continue to improve the performance of our application in local markets, and apply our strategy to grow our communities, which Derek will touch on a little bit later.

Now let’s talk about our focus verticals. In order to increase the number of active businesses on Snap, we focus on verticals with a high likelihood of success on our platform. In other words, what brands are going to be most resonant with the Snapchat Generation. Earlier last year, our team effectively re-prioritized to address verticals that were set up for resilience and growth once the effects of COVID became clear. Our teams found ideal customer-fit for Food Delivery, Gaming, Streaming, Ecommerce, CPG, among others, and we put fewer resources into verticals like Travel and Automotive, as the impacts were more severe in those categories. But we will have the ability to pivot back as soon as those categories are ready to advertise once again at the same levels where they were before.

Many might assume that direct response marketing - like mobile app install - is the sole realm of digital-first brands, like mobile games and online startups, as opposed to big brands. But this year we also partnered with larger, legacy brands to pivot to DR - across retail, consumer packaged goods, entertainment, restaurants, and more. Due to COVID, millions of consumers are establishing sticky new digital habits that might have otherwise taken years to form. We saw more growth in ecommerce in the last nine months than the nine years preceding it as an industry. Those habits are here to stay. With app usage up and stores closed, many large brand advertisers have pivoted - reimagining their app as a primary channel for customer engagement and sales, rather than playing second fiddle to a physical store or a website.
For instance, restaurant chains that used to create awareness ads about tempting food choices – you know, the drippy burger ones – well they’ve all become app install marketers too. They’re all direct response advertisers now. Same is true for CPG players, where we’ve seen rapid shifts towards performance marketing tactics that fuel the new surge in ecommerce sales.

And in a similar fashion, our streaming vertical accelerated dramatically as theatrical releases halted. There will be a new normal, and people will soon start venturing back out into the world – I really want to be one of them! But the digital acceleration will remain, as both consumers and brands see the benefit and ease of mobile ecommerce.

Longer-term, we believe Snapchatters will engage naturally with businesses of all sizes across our service, whether through a brand’s profile, finding store hours on the Map, or interacting with products using an AR Lens. You might discover or learn about a product or a brand via a Commercial or a Story Ad but that’s going to drive you to a Brand Profile, where you’ll find an augmented reality experience that allows you to learn more about the brand and sample or try on the product in augmented reality. In addition, with our measurement tools we can help advertisers track all the way to conversion, purchase, or sign-up. This combination ultimately provides a richer advertising experience that you can’t copy on a traditional medium like TV. This is why we believe we have a huge opportunity to continue to take share of the digital ad market as we scale.

Hopefully you have a better understanding of how we are positioned for long-term success. I have been here just over two years and it has been the most rewarding, exciting, fast-moving, innovative and invigorating time of my career. The best part about Snap is that we do all of this with kindness and appreciation for our teams, and we’re just getting started.

We’re going to take a 15 minute break now. But then join us again so you can hear from more of our senior leaders here at Snap!
Hi everyone, and welcome back! I’m David Ometer, Senior Manager of Investor Relations. I hope you enjoyed hearing from Evan, Bobby and the team earlier today, and have a better sense of our company, our vision, and how we think about building products, turning them into platforms and then into businesses.

Coming up, you’ll be hearing from four more senior leaders at Snap, and we will then move into our analyst Q&A session.

I would like to quickly remind you that at the conclusion of today’s event we will be posting our presentation and transcripts to our Investor Relations website.

Finally, and most importantly, thank you for taking the time to join us today. And now, it is my pleasure to introduce you to Kenny Mitchell.
Hi everyone. I’m Kenny Mitchell, the Chief Marketing Officer here at Snap. My team spends its time on both business-to-business and business-to-consumer marketing efforts, like dimensionalizing the Snapchat Generation through brand campaigns, highlighting new products and features and original content to Snapchatters, and educating global clients on how they can have success driving their business through our powerful ad platform.

I have a unique position on our team as someone who was a longtime advertising client of Snapchat. I had the privilege of leading Marketing teams at Gatorade and McDonald’s that leveraged Snap’s video and AR ad formats. You might remember the Gatorade dunk lens dumping virtual Gatorade on millions of Snapchatters’ heads. That was a really fun and innovative Lens that was ahead of its time back in 2016. So I understood Snap’s unique ability to drive business value long before I joined two years ago. That was the early days of advertising on Snap – and honestly, there were some growing pains in those days. So much has evolved since then, and I feel grateful to have the opportunity to share our marketing strategy with you.

Historically, Snap’s successful meteoric growth was largely driven organically by the community network effect. That contributed to high levels of engagement and retention, and remains a core pillar of how we grow today.

With the size and scale of our community and business, we now supplement that with a formal marketing practice. But we keep it lean - that’s our philosophy. We utilize a small (but mighty) team and disciplined investment approach to drive growth.

We speak to two primary audiences in our work: our community and our advertising partners and I will walk you through how we engage them.

Let’s start with our community. So who are they? Let’s take a quick look!

As you can see and have heard today, we call this community “The Snapchat Generation” and they use Snapchat to communicate with close friends and keep up with what’s going on in the world around them. Let’s talk about the sheer scale of the Snapchat Generation.

An average of 265 million people from around the world use Snapchat every day, many of whom skew towards Gen Z and Millennials. In the US, UK, France, Australia and the Netherlands we reach 90 percent of 13-24 year olds and 75 percent of 13-34 year olds. And while people typically associate Snapchat with only having a young teen community, it might surprise you that approximately 80 percent of our reach is above 18.
We focus a ton on The Snapchat Generation, because - simply put - they’re critically important to the future. They’re driving new behaviors, they have unique values and frankly, they’re defining what the future will look like. As consumers, Gen Z and Millennials are powerful, wielding $1 trillion in purchasing power, and making up over 40 percent of global consumers.

As for their values, Snapchatters take social responsibility very seriously, they celebrate their individuality, they build communities, they nurture friendships, and they communicate in many different ways (often through AR and video). They are the most educated, most tolerant, most active, and most diverse generation we’ve ever seen.

And, they like to communicate – constantly! And often with the camera. Snapchatters on average open the app 30 times a day! That’s why Snapchatters are 150 percent more likely to prefer to communicate with pictures over words than non-Snapchatters. On Snapchat, they express themselves freely, with their closest friends. It’s the easiest and fastest way to communicate the full range of human emotions without pressure to feel popular, pretty, or perfect. That’s why 95 percent of Snapchatters say that the app makes them feel happy, more than any other services tested. As a result of the pandemic, the Snapchat Generation has a renewed appreciation for friends and family, and they will carry this deep need for connection through as a defining characteristic.

Snapchat was built for what matters to this community. We know that, beyond communication, they also care about great content, but they view it differently. They’re cord cutters – some are even “cord nevers” - too young to even have cords in the first place. According to eMarketer, the average US adult spends 29 more minutes per day with mobile content compared to with TV, and that number is going to keep going up. We believe this trend is driven primarily by the younger generation, whose time spent watching TV is a fraction of their older counterparts’. You won’t find them on linear TV or commercial-supported streaming. The engagement we see on Discover validates this shift.

Whether it’s the shows and content they watch on our platform, or the pictures and videos they send to their closest friends, the Snapchat Generation has completely transformed the way the world communicates and experiences entertainment: mobile, full screen, and visually interesting.

So that’s a bit about who the Snapchat Generation is and why we care about them so much. Now I want to share a bit more about how we reach the Snapchat Generation and grow our community. We generate awareness and understanding of Snapchat’s values through strategic marketing initiatives that support our long term goals. Here’s an example: in the summer of 2019 we launched our first ever global brand campaign, called “Real Friends.” The campaign highlighted how dozens of pairs of friends and family members around the world use Snapchat to stay connected. That campaign amplified one of our biggest, unchanging priorities: being a place that supports real friendship. We want Snapchatters to feel free to be themselves, free from judgement. That’s a
concept we believe in as human beings, but it’s also an important strategic and competitive advantage.

We also celebrate tentpole moments to drive engagement with current and potential Snapchatters around the world. To celebrate Diwali with Real Friends, we created custom experiences including Lenses, Filters, stickers, and Bitmojis. We saw a 25 percent Lift in daily active users during Diwali, and over 75 percent increase in story posters. Halloween has been another great example of a tentpole moment. In 2020, we launched more than 100 Halloween lenses which led to more than 9 billion impressions.

We’re a global company and we need to reflect the values, culture, and personality of our communities in every region we’re in. It’s no surprise that when we are able to localize content and experiences for a specific culture, we see dramatic improvements in engagement. And it makes sense – Snapchat should always feel like it’s made just for you – no matter who you are.

Another priority for growing our community is literally growing up with it! So we’re investing in retaining our users as they age up. Our content, which Ben will talk a little bit more about is a key component of that. And we also see high engagement between parents and kids! The beauty here is that when your parents are on Snapchat, it’s not embarrassing – unlike other platforms, we don’t have public comments or friend lists.

Ultimately, we believe that celebrating our community of real friends and the moments that are important to them – and highlighting our innovative products and powerful camera – will increase engagement with our current and future Snapchatters.

Now I imagine that hearing how we plan to increase our advertiser base is of particular interest today. Marketing works directly with our sales and monetization teams to support revenue growth by cementing our value proposition to advertisers.

We leverage marketplace data on the advertising community that’s gleaned through our direct engagement with brands and a bi-annual research study where we uncover valuable insights to inform our marketing approach. One important insight we see – awareness of our platform is not an issue, and for those who consider us, they are likely to spend with us and have strong perceptions of the platform to drive their business. However, we do have an opportunity to convert more advertisers who are aware of Snapchat to having a deeper understanding. And when we’re successful, we know they’ll be far more likely to advertise with us. In fact, in the US and France, roughly 90 percent of advertisers who consider Snapchat go on to spend on the platform.
In one such study we identified a material opportunity to address - not all advertisers understood the value of our audience. So, to help advertisers better understand the value of the Snapchat Generation, in August we launched our first-ever, global business-to-business marketing campaign showcasing the values and behaviors that characterize our community. The campaign ran in 10 markets and featured unique insights on our community and brand testimonials. In fact, the video you saw a bit ago was actually part of that campaign.

This was received positively by our advertising partners and increased our brand image across several metrics. We saw strong ad recall and significant increases in advertiser consideration of Snapchat as a partner. In measured markets we also saw over 50 percent of advertisers were more likely to consider Snapchat due to the campaign, as measured by Advertiser Perceptions.

Another opportunity noted by global advertisers was a gap in understanding of our ad solutions. To address this issue, we launched Snap Focus, an online learning and certification course for new and lapsed advertisers looking to better understand Snapchat and how to find success on our platform. We followed up the launch later in the year with Snap Connect, a new set of content and certifications aimed at educating global marketers about direct response advertising on Snap. I’m excited to share that within seven months, more advertisers have completed Snap Focus certifications than the entire 3-year life of our previous education service.

In summary, we built Snapchat for a generation that craves visual communication and values close friendships. In turn, it’s become a daily fixture of hundreds of millions of lives. We also built it to meet the ambitious goals of advertisers around the globe.

I am thrilled with our team, our disciplined approach, and our insights driven strategy to drive future scale. I will be busy leading initiatives that will help grow the Snapchat Generation, that will drive engagement with our new products and features, and deepens our relationships with advertisers. I couldn’t be more energized about what’s in store.

Now I’d like to welcome Ben Schwerin who will talk about how we are revolutionizing mobile-first content and growing partnerships across Snapchat.
BEN SCHWERIN, SVP, CONTENT AND PARTNERSHIPS

Thanks, Kenny. My name is Ben Schwerin and I’m the SVP of Content and Partnerships at Snap. Our team believes deeply in the power of relationships. When we started, we asked our partners to make a bet that we would build and innovate together, that we were committed to understanding their goals and would help them achieve them, and that we could ultimately invent entirely new businesses and create long-term value for their customers. We know that we can’t succeed unless our partners and community do too. A vibrant, diverse partner ecosystem today puts us in a strong position to launch new platforms tomorrow. I’m excited to share how we’re working with our partners to power our Content and Developer Platforms.

In early 2015, we introduced Discover, a closed platform with top media partners like CNN and ESPN. It featured premium quality, vertical, made-for-mobile content. It was an entirely new way to entertain and educate a young audience that was increasingly hard to reach anywhere else. We created a sustainable, fair business model from the start and relentlessly focused on what mattered most to our partners. Today, we have a vibrant ecosystem, featuring diverse, localized content in 9 different languages from nearly 500 partners in 17 countries around the world. While we’ve grown, our focus on quality, integrity, and brand safety has remained the same. Our partners are hand-picked, and content is carefully reviewed according to our community guidelines. We’re proving that real news can still win. In Q4 2020, 25 different channels on Discover had a monthly audience of more than 20 million viewers. NBC alone reached over 50 million viewers across its 12 channels.

With Discover, we set out to reinvent the news stand and when we launched Shows, we collaborated with our partners to reimagine what it meant to watch short-form video on a phone. Together, we’re producing compelling, dynamic content experiences and providing brands with premium, curated marketing opportunities. The total daily time spent watching Shows increased by nearly 70 percent year-over-year in 2020. And in the second half of the year, over 85 percent of the US Gen Z population watched at least one Snap Original, shows made exclusively for Snapchat.

We’re working on Originals with A-list stars like Ryan Reynolds, who launched a show last month called “Ryan Doesn’t Know”, and Will Smith, who’s talk show “Will From Home” just finished its second season - bringing the total number of viewers who watched the series to 43 million. We listen closely to our community and are deeply committed to telling stories that cover the issues most important to them. “While Black with MK Asante,” which premiered in late 2019, and recently aired its second season, explores what it means to be young and Black in America - and to date, reached nearly 17 million viewers.

The video you are about to see gives you a sense of the innovation and diversity of Snap Originals. Let’s take a look.
Now, let’s talk about our creator community. When we released Stories way back in 2013, we saw popular Snapchatters begin to connect with their fans in a more personal way than ever before. Our team invested heavily in establishing close relationships with talent. We’re based in Los Angeles, and it’s in our DNA. Their direct feedback and insights have helped guide the development of products that enabled them to amass global audiences, communicate with their most passionate fans, connect with brands, and build businesses.

The strong bonds we’ve built are helping to shape our newest content platform, Spotlight. We’ve heard from many aspiring creators that finding financial success on other services can feel like an unreachable goal. We believe that our community should be compensated for their creativity. That’s why we’re distributing over $1 million dollars a day to creators who make the most engaging Spotlight Snaps - and you don’t have to be a famous celebrity to earn. Success is driven by individual submissions rather than followers. Spotlight is a fun, safe and fair environment that provides an incredible new opportunity to be discovered on Snapchat.

For iOS and Android developers, finding an audience is more challenging than ever before. We listened to the community, and are building different kinds of platforms designed to help them succeed. We launched Games in 2019, and Minis in 2020. Our approach for both is similar to how we created Discover; we began with a small number of hand-picked partners who worked closely with us to innovate and build sustainable ecosystems.

Game developers get instant access to a large engaged audience, and the ability to leverage powerful, exclusive Snapchat tools and capabilities, like our Bitmoji Avatars, with no download required. They earn revenue from our popular format Snap Ads, just like media partners on Discover. With Minis, our partners can build lightweight apps inside Snapchat, leveraging our existing platforms in ways that make it easier and faster to deliver their core product value. For example, Atom Tickets built a Mini to help Snapchatters choose a movie, find a theatre, select seats, and buy tickets.

We believe that as they grow, Games and Minis will deliver new opportunities for both engagement and monetization.

Now that I’ve told you about how we’re helping developers build businesses on Snapchat, let’s talk about how we are bringing the best of Snapchat to our partners’ apps. Snap Kit makes it easy for developers to integrate our most powerful features, like Bitmoji or Augmented Reality Lenses. We built Snap Kit from the ground up with a privacy-centric approach. This means the focus is on creativity and user experience, not user data. We’re helping start-ups grow, and also partnering with some of the biggest companies in the world. Spotify and Reddit are using Creative Kit to seamlessly share dynamic content from their apps directly into Snapchat. In addition, we partnered with Twitter on an API integration that allows Snapchatters to share public Tweets in a Snap.
Bitmoji has become so much more than an avatar. They make it more fun to talk to your friends, express how you feel, and show off the latest trends from brands like Ralph Lauren and Jordan. Bitmoji can help you find your friends on the Map, and they’ve even become the stars of your favorite games. We built Bitmoji Kit, because we knew our partners could find innovative ways to make your avatar even more powerful. Samsung, Google, Tinder, Venmo, and OnePlus are just a few that have integrated Bitmoji.

We’ve built one the world’s most popular cameras, powered by an advanced augmented reality ecosystem. 200 million people a day, on average, engage with AR Lenses and over 1.5 million of these lenses have been created by our community on Lens Studio. Augmented reality is changing the way we communicate, play, shop, and learn. We’re investing in a future where computing is overlaid on the world. But, we can’t do it alone. That’s why we built Camera Kit.

Camera Kit extends the reach of our AR technology and lens creator community to our partners’ applications. We’re already powering experiences for Major League Baseball, Triller, and Yubo. We’re also helping companies outside the US offer their customers locally relevant AR experiences, like in India, through our new partnership with ShareChat and their short form video platform, Moj. And we’re just getting started.

We’re building long-term relationships with partners as we scale our business and product offerings. Today, more than 1,000 apps have integrated with Snap Kit, and nearly 150 million Snapchatters are engaging with these integrations every month.

Our partners are utilizing our innovative platform products, and building sustainable businesses on Snapchat. We’re expanding these relationships and creating new ones, and are so excited about what’s ahead.

Now I’d like to welcome Jerry Hunter to show you around our engineering organization and how all of the incredible products we dream up actually get built.
Hi, I'm Jerry Hunter, SVP of Engineering at Snap. It's a pleasure to speak to you all today. I am excited to talk about the work we have done to build the technology foundation that underlies the Snapchat application, and the platforms that our Snapchat community and partners use each day. Snap was an early mover to build on top of third party Cloud Infrastructure and this has been critical to our early success. We have also done a tremendous amount of work over the past couple years to rebuild our proprietary technology stack in order to make it easier and more efficient for our engineers to innovate on top of the Cloud Infrastructure. This has allowed us to accelerate our pace of development to a level that we believe has been impactful for Snapchatters, our advertising community and the many partners who are building businesses on Snapchat. Now let's dive in a little deeper to discuss our technology stack and how it is helping to empower all of this innovation.

There are four primary components to our technology stack, which are pictured here on the slide:

1) First we have the third party cloud infrastructure partners that we leverage. Today those are Amazon Web Services, or AWS, and Google Cloud Platform, or GCP.

2) Second, is the Snap backend base layer, which we recently rebuilt in-house. This layer contains nearly all of our connections to the cloud, common services used across our products, and serves as the base layer upon which we innovate on behalf of our community and partners.

3) Third, are the customer facing products and platforms that Snapchatters, our advertising partners, creator partners, and content partners use each day. These are separate boxes here because they are built on separated code bases with clean well-defined boundaries, meaning we modularized our code base on the mobile phone.

4) Fourth are our self serve platforms that our partners leverage to build their products and businesses on Snapchat including our monetization platform accessed via ads manager, Snap Kit, Minis, and the Snap Games platform.

Let's start at the bottom with the cloud.

We built Snapchat on cloud-based infrastructure from day one, as opposed to building our own data centers. We are fortunate that this was an option when we began to build our company nine years ago. We have evolved over time from a single cloud partner into a multi-cloud approach. There are several reasons why this strategy is important to our success.

By leveraging third party cloud providers for basic infrastructure needs such as storage, compute, and media delivery we are able to access fully scaled and expandable capacity from day one for any product or service we launch with no upfront capital commitment. This was very important in our early days and remains an equally important advantage today, as it lowers the cost of rapid innovation and product development. The implications for our capital expenditures may be obvious, but the benefits
extend far beyond this. We do not have to dedicate scarce engineering time and resources to building and managing infrastructure and services that are necessary to make our products work, but that are not critical to differentiating our core product value. When we launch new products such as Spotlight, we can therefore move faster through the development phase and launch to our community with confidence we will have the capacity to handle rapid adoption with attractive unit economics at the outset.

This advantage is amplified by our multi-cloud strategy, which enables us to select the optimal service from the optimal cloud partner for each of our workloads at any given time or phase of development. As each Cloud Partner is constantly innovating to deliver differentiated services and expanding the scale of their operations, we benefit from improving pricing and quality of service over time. We are continuously implementing migration projects to redirect workloads in order to optimize for service and cost across clouds. In 2020 alone, we’ve completed four major cross-cloud migration projects, and in each case have benefitted from material cost and quality improvements.

The ability to optimize across partners, and to access their immediate scale is increasingly important as we accelerate our growth in new markets. By leveraging third party cloud partners we can enter a new country or region and immediately have the benefit of local connectivity and infrastructure at scale. This allows us to leverage infrastructure in regions all over the world on an as needed basis.

In the early days, we utilized a single cloud in a single region in the middle of the US. If you were in India, and you were communicating with somebody a mile away from you, those communications had to travel all the way back to the US and then make their way back to that person in India. That delay made the app feel clunky and slow. Today, utilizing regionalized infrastructure allows us to get our service as close to the customer as possible to improve performance for our Snapchatter community.

One last but important point regarding our use of third party cloud infrastructure partners is that we have a high degree of optionality and flexibility over time. We can pivot or adjust our strategy over time by adding new Cloud Infrastructure partners or potentially bringing individual services or workflows in house. We regularly deep dive on the economics and efficiencies, including which clouds we use for which services, and the high level build versus rent economics. Due to the flexible nature of our model, we could easily choose to build and operate some of the services in-house if we can do so more efficiently than a third party could (which so far has resulted in us not building internally given their scale and the cost benefits that come with scale). While this could make sense for some services at some point, thus far the practical implications of our analysis has been working with our cloud infrastructure partners on favorable rate negotiations that were informed by this work. For example, we completed rate improvement and new service negotiations with each of our...
providers in every quarter of 2020 and we expect that these relationships will continue to evolve as we work together over time.

A lot of the flexibility I’ve mentioned today, including the ability to migrate workflows or specialized services between Cloud infrastructure partners is empowered by our work to rebuild the base layer of the Snap technology stack, where we manage and maintain the vast majority of our connections to the cloud. This is the middle layer of our technology stack that you saw earlier, and is what decouples our Snapchatter and Partner facing platforms from our cloud infrastructure providers.

This layer is central to how we manage our overall product development. Practically speaking, we broke up a monolithic backend code base, which was a bottleneck on both engineering velocity and availability, and transformed it into a web service backend where small, nimble engineering teams could make changes independently to more quickly deliver innovation to our end users and partners.

This strategy allows us to have dedicated teams focused on managing the efficiency of our Cloud Infrastructure who can constantly tune and optimize what services we use, what provider we use, and how we use those partners. We also centralize internal services here that span all products within Snap – such as identity and friend graph. This makes it much easier and faster for the teams that build our customer-facing products to innovate. It also benefits our unit costs by streamlining connections, and it improves performance.

To put a finer point on this, we now have a dedicated team focused on operational excellence that sits over this backend base layer with clear visibility and instrumentation over the workflows that run end to end from our customer facing platforms such as the Camera, all the way back to our third party cloud partners. This has allowed us to focus on performance as a feature across our technology stack in order to make our application and features work faster, more reliably, and more efficiently. One of the most exciting aspects is that we consistently find that when we take action to make something more reliable, it not only drives more engagement with our community, but it also allows us to get unit cost efficiencies. Likewise, we almost always find that these efficiencies make our workflows faster and more reliable for our community.

In this way, our backend base layer is enabling improved app performance, which drives engagement and improves unit costs, which allows us to reinvest in our product, which is a virtuous cycle for our business. For example, through the recent rewrite of our Communications platform, we reduced the median latency of sending Snaps by over 20 percent, which supports our efforts in being one of the fastest ways to communicate. That efficiency not only benefited Snapchatters, but also reduced our messaging unit costs by at least 25 percent. This is part of our ongoing program of making our products better for Snapchatters while also driving down infrastructure unit costs for our business, which results in more resources to invest back in our products.
From here, let’s talk about the technology platforms we’ve built on top of this Backend Baselayer starting with the services our Snapchatter community use every day.

Our team has spent extensive time and effort separating out and modularizing the code within our application in order to allow the development teams that manage each of these codebases to innovate faster and independently. The backend base layer empowered this independence by allowing each team to easily access core back end technologies and services while minimizing the need to coordinate across teams, or manage connections to the Cloud, as they work on individual platforms. For example, this allows our Maps platform team to operate independently from our Communications platform, while easily accessing common tools such as user identity or the friend graph, which improves our ability to experiment quickly and deliver new features and functionality quickly, which increases the pace of innovation at Snap.

Ultimately, we believe our agility in product development is one of our most important differentiators. You may have noticed, or learned from Evan and Jacob’s presentations earlier today, that the pace of innovation and new product releases has accelerated over the last couple of years. This is not a coincidence. The infrastructure we have built has empowered a whole new pace of development for products and features as our teams have been able to take advantage of our Backend Base Layer and Modularization. Spotlight is a great example of an entirely new platform that was built and launched under this new approach. We were able to bring Spotlight to our community sooner, and with richer functionality, precisely because of the ability to build upon our backend base layer and to operate it as a separate modularized codebase.

Our forward thinking technology stack, and modular approach to empower platform development, has also expanded our ability to innovate on behalf of our partners and I’d like to turn to that next.

One of the most exciting aspects of our development roadmap is the work we are doing to build scalable self-serve platforms that allow our partners to build business and develop products using our tools to reach and engage our large and growing Snapchatter community. We have leveraged our back end base layer and modular approach to building platforms to build several partner platforms that are powering our growth and helping our partners find success on Snap. The first and perhaps most mature among these is our self serve monetization platform that powers our auction and our advertising partners access through Snap Ads Manager. This full featured platform has nearly reached feature parity with the best and most mature ads platforms in the world and now powers nearly all of our fastest growing advertising business. We have since followed with our Games platform, our Minis Platform, and the Snap Kit platform, each of which give third party developers access to elements of our Backend Baselayer in a privacy safe manner so that they can develop engagement experiences for our community that are powered by our technology and tools and assets such as Bitmoji, Chat, the Camera.
In the last three years our focus has been to build a modern architecture that has enabled us to significantly improve what the average Snapchatter experiences. By focusing on modularization on the client (both iOS and Android) we have not only created engagement enhancing performance boosts, but significantly improved the pace of feature innovation. By modernizing the backend to internal web service architecture, we have, and will continue to, create engagement enhancing performance improvements in existing markets, but also bring enormous improvements to our most important international markets by localizing key parts of the Snap base-layer. All this while simultaneously using negotiating leverage that comes by having multi-cloud and constant unit cost engineering improvements that drive unit costs lower across the entire stack. So faster, higher quality, and lower costs.

All this is designed to enable us to cost effectively scale rapidly. But it’s also designed to enable our self service partners to scale quickly too. Highly performant, low cost platforms not only help us grow quickly, but it helps our partners from advertising to games easily connect into our platform and find scalable success, providing more vectors for virtuous growth.

Now I’d like to turn it over to Derek who will talk more about our financial progress.
Hi there, I’m Derek Andersen. Thank you all for joining us today. I’m excited to share how we think about managing the investments in our business and how we expect our financial future could unfold in the years ahead.

Please be reminded that as we mentioned earlier, we will be making forward looking statements, so please be sure to review that disclaimer.

I will start by addressing the progress we’ve made in recent years. As you can see, DAU and revenue growth accelerated over the last two years. The acceleration in our community reflects the redesign to separate social content from media content, the rebuild of our Android app, our Augmented Reality innovations, and the investments made to localize our product. The acceleration of our revenue growth reflects the sophistication of our ad platform, the measurable returns delivered by our ad products, and the investments we have made in our sales teams to support our advertising partners.

Over this same period we have scaled our operations efficiently in order to achieve full year adjusted EBITDA profitability for the first time in 2020. This was a goal we set at the beginning of the year and we are very proud of our teams for executing against our plan to deliver this result amid a challenging operating environment.

Let’s focus next on how we will build on these trends, starting with the opportunity to grow our community.

We view the smartphone population as a good proxy for our addressable market. North America is our most established region, and we have made the most progress with the 13-34 year old demographic in the US and Canada, but have lots of room to grow beyond this base. Rest of World is our least mature region, and we have been able to accelerate our growth here post the rebuild of our Android app and we are just getting started. In the middle you have Europe, where we have made solid progress with our core demographic in a handful of countries, but have significant room to grow beyond this base. Now let’s dig a little deeper into this opportunity.

The Rest of World Region comprises the majority of the global smartphone population, and is the largest driver of our community growth. Our DAU represent just 4 percent of the total Rest of World opportunity. Focusing on our core demographic of 13-24 year olds, this group alone represents more than half a billion smartphones. For comparison, we reach over 90 percent of this group in our established countries so this presents a large opportunity for us to grow. Now let’s talk about how we
can capture this opportunity.

Following the rebuild of our Android app we have made investments to localize our product for specific markets including, adding local language support, building local AR creator communities, adding locally relevant content, investing in local marketing initiatives, and forming local telco partnerships to improve distribution and bandwidth. This set of tactics forms the basis of a repeatable playbook we can now leverage to drive growth.

One of the first markets where we employed this strategy is India. We focused on India early because it has a large and fast growing population of young smartphone users, because high speed mobile networks are expanding quickly, and because GDP per capita is growing rapidly. We’ve made significant progress in implementing our playbook in India, and we are encouraged to see that our DAU in India has more than doubled year over year in each of the last four quarters. We view this progress as validation of our approach and are excited to extend our playbook to more countries. Now let’s discuss where we’ll focus our growth investments in the near and medium term.

In our most established markets our penetration of the 13-24 year old demographic is typically above 90 percent. In these markets we will first be focused on continuing to win with new smartphone owners as they enter their teen years, second we will seek to maintain our strong long term retention rates to ensure we age up organically, and third we will be making focused investments in our product, content, and marketing to deepen engagement and accelerate adoption among older demographics.

Our International growth opportunity markets are typically ones where we are only lightly penetrated, even among our core 13-24 year old demographic, and these countries are typically Android heavy. In these countries we will focus on executing our International growth playbook as we’ve discussed earlier.

We believe that the large untapped population of smartphone users worldwide, and our well-developed approach to growing our community, will enable us to sustain our recent elevated growth rates for years to come.

Lets now turn our focus to our plans to grow our top line. We have made significant progress in growing our ARPU. North America and Europe have led this growth as we have begun to ramp monetization in our highest penetration markets. ARPU growth in Rest of World is best viewed as an output metric at this stage as we accelerate the growth of our community while just beginning to monetize in a subset of the most mature markets.
To put our monetization potential into context we compare our ARPU and audience size to more mature platforms. Here we focus on North America, as even the most mature platforms are generating approximately half of their global revenue in this region. We still have a long way to go to realize our full monetization potential given our unduplicated reach with critical demographics, the depth of our engagement across our platforms, and the sophistication of our advertising platform and products. We believe that North America alone holds enough opportunity to keep our topline growing at attractive rates for years to come.

To put a finer point on this, let’s look closer at our current penetration in the world’s largest digital ad markets and where we observe high long term retention rates. We’ve achieved over 70 percent penetration of 13 to 34 year olds in countries comprising over half the world’s digital ad spend. While we are very excited about the opportunity to grow our community globally in order to expand our long term potential, we already have deep penetration in the markets that will be most critical to driving our top line growth over the near and medium term. Now let’s talk about how we plan to capture this opportunity.

We’ll start with Stories and Discover. This is our most mature screen for monetization, yet still very early in terms of realizing its full potential. This platform began with Friend Stories and they are a powerful draw bringing Snapchatters to this screen, which has expanded to include content from Publishers and Shows that leverage our unique mobile first story-telling formats to engage our community. In 2020, total time spent watching Shows was up nearly 70 percent YoY. As we continue to deepen our engagement, our available inventory of premium ad units has grown. These premium ad units are among our highest yielding, and in high demand with revenue from our Commercials ad product more than doubling year over year in each quarter of 2020. As a result, we believe this platform has the potential to deliver robust top line growth for years to come.

Next we have the Camera. Our app opens to the camera, our audience opens the app 30 times a day to create more than 5B Snaps on average, and the vast majority of Snapchatters leverage our AR tools every day. The resulting advertising inventory potential of our camera is therefore already immense.

Today, it is simple and fast to create an AR ad product through our self serve tools, or by leveraging our creator community. The cost to start an AR campaign is now just $5 and can be tied directly to measurable actions such as a product purchase. With the establishment of a Brand Profile our advertising partners now have a home where they can drive audiences, which turns their AR experiences into lasting assets.

It is still very early in the evolution of AR advertising, and we are excited to be a clear leader. We believe the Camera will be a multi-billion dollar platform and that Augmented Reality represents our most
exciting long term opportunity.

Spotlight provides a compelling experience for engaging with Snaps created by our community. We are currently focused on improving the product experience for our Creators and Snapchatter community, but the platform is already attracting a large and deeply engaged audience with more than 100 million monthly active users in January. As a result, we are excited about the potential for Spotlight to further expand the supply of our highest yielding and most in demand advertising products in the future.

We elevated the Map with the introduction of the navigation bar last year, and today the Map reaches more than 250 million monthly active users. In 2021, we will focus on building utility for local businesses to begin to lay the groundwork for future monetization. We believe the Map will be a multi-billion dollar platform over the long term and that it represents a logical on ramp to Snap’s advertising platform for millions of small businesses around the world.

Next is our Communications platform. Currently, the monetization of this screen is focused on the sharing of sponsored AR experiences among friends. As I mentioned earlier, these advertising products are well positioned to grow going forward.

Games are a natural extension of our Communications platform that allow friends to play and have fun together. Our Games platform includes our Commercials ad unit and we are now experimenting with Tokens to enhance game play as well. Minis are another natural extension of the Communications platform. It is early days for Minis, but there is a natural path to include more partners over time, which will lead to more potential transactions, and of course our ad products will be available to help our partners expand the reach of their Minis on our platform. We believe that our innovative and community focused approach to monetizing our Communication Platform will build it into another billion dollar platform over the long term.

We believe that based on the monetization platform we’ve built, and the product roadmap we have discussed today, that we can responsibly grow our topline revenue at 50 percent or better year over year for at least the next several years. I would be remiss if I didn’t point out that there are risks to this estimate. To achieve this we will require a favorable operating environment and strong execution among many other factors. That said, we’ve demonstrated an ability to execute our plans and we are confident in the plans we’ve laid out here today. Now let’s turn our focus towards our cost structure.

Scaling our business efficiently to expand gross margins has been critical to our financial progress. Over the past two years our infrastructure costs per DAU have declined by 2 percent per year, while
our ARPU has grown at an average rate of 27 percent per year. This leverage has allowed us to make strategic investments in content, while expanding our adjusted Gross Margins by 19 percentage points over the last two years.

In the near term, we expect content costs to be a headwind to margin expansion as we continue to support the launch of Spotlight with fixed content investments. That said, we still expect Gross Margins to expand over the next year, but at a much slower pace than in 2020. We see a path to reach 60 percent or better on Gross Margins over the medium term as we begin to monetize Spotlight and the Map, and as we continue to scale monetization of our other platforms in the years ahead.

In order to deliver on the product roadmap and the top line growth that we have discussed today, we will be investing heavily in the future of our business. Over the last two years we have carefully prioritized our investments in order to grow our level of investment at a sustainable rate while making consistent financial progress. This balanced approach was a key input to achieving full year adjusted EBITDA profitability in 2020 and we will carry this approach forward.

Our revenue growth accelerated in the second half of 2020, and as I mentioned earlier we believe we can sustain approximately 50 percent topline growth rates for the next several years under favorable operating conditions. With this expectation, our balanced approach will lead to higher levels of investment. We estimate that the year over year growth in Operating Expenses will rise from approximately 25 percent year over year growth in 2020 to year over year percentage growth in the mid-30s in 2021. The exact rate of growth in Operating Expenses could vary around this range depending on the rate at which we ramp hiring efforts, as well as the ultimate timing and scale of specific investments in our product and marketing. This level of investment will allow us to invest in our monetization and sales capabilities to capture our ARPU opportunity faster, to invest in our product to build on our pace of innovation, and to invest in marketing in order to grow our community for the long term. While our investment levels will be higher in the coming year, we remain committed to sustained full year Adjusted EBITDA profitability, and continued financial progress over time.

Now let's move further down the P&L. Currently, Stock Based Compensation represents more than 80 percent of the bridge from Adjusted EBITDA to Net Income. SBC is an important strategic input for our business as it is among the most powerful mechanisms we have to build the ownership mentality into our culture. Today more than 95 percent of our employees receive a portion of their compensation in the form of stock that vests over multiple years.

We believe that carefully managing our overall rate of dilution is a critical input to building shareholder value over the long term. The rate of growth in our fully diluted share count went from 4.6 percent in 2019 to 3.4 percent in 2020. Excluding the impact of any material M&A or financing activity, including
the potential dilutive impact of prior convertible notes, we believe we have a path to get this rate to 3 percent or below in 2021, and remain committed to managing this carefully going forward.

While we plan for the expected we believe it is important to prepare for the unexpected as well. As a result, we believe in maintaining a conservative balance sheet by raising capital before we need it, and when market conditions are advantageous. Over the past two years we’ve raised two rounds of convertible notes with total proceeds of approximately $2.3 billion. These two transactions, combined with rapidly improving Free Cash Flow, have allowed us to build a base of cash and marketable securities of $2.5 billion, which equates to approximately one year of our total cash cost structure. In addition, we maintain a credit facility of over $1 billion to ensure access to additional liquidity. While much of our investments have focused internally on hiring and product, we have also established a track record of investing in teams and technology to accelerate our product roadmap.

Here you see a small sample of the investments we have made in recent years to accelerate our roadmap across our various platforms. In each case these investments provided key technology and personnel to advance our business. While all were strategically important, none have been large enough to alter our culture or risk the momentum of our business. It is difficult to predict what opportunities may present themselves in the future, but we intend to maintain a strong balance sheet to ensure we can act strategically when opportunities arise.

I hope that you will take away with you today an understanding of our strategy to grow our community over time, the strength of our monetization platform, the long term ARPU potential of our business, and an appreciation for the discipline we are employing as we invest in our business. You’ll notice that we have also declined to provide formal annual or long term guidance today. We believe that the space we are operating in is evolving rapidly, and that it is strategically important to remain agile at this stage in our growth.

Given this, we have endeavored to share how we plan to go about growing our business, how we think about balancing our investments relative to that growth, and why we believe in a conservative approach to building our balance sheet. We hope that you will find the transparency around how we think about the business to be constructive, and that it will be informative as you consider how our financial future may unfold over time, and as the operating environment inevitably changes.

In just a moment, our Chief Communications Officer Julie Henderson will join to get us started with our Q&A session. Thank you again for coming today and we look forward to taking your questions.
Hi, everyone. Thanks so much for joining us today. I’m Julie Henderson, and I lead Communications at Snap. Welcome to the Q&A portion of the day. I’m joined here with Evan, Derek and Jeremi. In a second, we’re going to open it up to our analysts’ questions.

While everyone is getting lined up in the queue, I thought I’d get us going with one question for Evan. Evan, we heard a lot of information today from various leaders across Snap. I guess I would ask you, over the next three-to-five years, what are you most excited about and where are you spending your time?

Thanks, Julie and thanks, everyone, so much for joining us today. We’re so excited to be able to share more about our business with all of you. I think the thing that we’re most excited about is the potential of our camera to change people’s lives. Bobby had this really prescient vision, when we were working back in my dad’s house, and he said, “Gosh, if people use their camera, instead of once a week or once a month to document a special occasion like birthday, and instead they use their cameras 10 times a day, or more then we can build a really transformational business.”

What we didn’t expect, was that the camera would go from being used every day as a communication tool, to now a way to tell stories or see what’s happening around the world on our map, or create a totally new entertainment platform, in Spotlight. And of course, to drive the growth of augmented reality. So, I think the thing that excites us the most is the unbelievable potential of the camera and the feeling we have that, now almost 10 years later in the growth of our business, that we’ve barely scratched the surface of what’s possible with things like AR and the way that they’re going to drive real utility for our community in the future.

And so, I guess, aligned with that, I’ve been spending a lot of my time on our forward-looking product roadmap, things that might not ship for three, five, even seven years, and thinking about how we’re going to build more engagement in our community and also transition to this future, where computing is overlaid on the world.

Wonderful, thank you. So, I think we have everyone lined up. So, now I’m going to turn it over to our operator, Alyssa, to open up the queue.
And our first question today comes from Brian Nowak with Morgan Stanley, please go ahead.

Thanks for taking my question. I have two. The first one, Jeremi and Derek, I guess around the 50% forward growth, maybe Jeremi, can you just talk to us about the largest hurdles you need to overcome across your different buckets of advertisers - enterprises, DR and SMBs - to be able to deliver that 50% growth?

Then the second one, you have so many new use cases across the platform now with lenses, Discover and Spotlight. Can you just help us better understand the incrementality of time spent across those products? And how does overall time spent per user look on the platform? Thanks.

Thanks for the question. I’ll take the first part and then have Derek answer the second part. So, in terms of hurdles, I think it’s really around education. So, for instance, we are selling to an audience, oftentimes who don’t use Snapchat on a day-to-day basis. While they certainly see it in and around the world around them with as many users as we have, or they have, perhaps teenagers or college age students that use it all the time, they themselves don’t use it all the time. Which ends up being a somewhat of a heavy lift in terms of education at the platform.

What’s been so great has been working with all of our advertising partners, and developing programs like something called Snap Focus, where we’re able to really distill what it is, what Snapchat is, and why it matters to this generation in terms of investment. So, an example of talking like that to an advertiser who may not use Snapchat every day, is basically to say, open your phone, what apps do you see that you use the most? Is it your camera? Is it the memory in your camera? Is it your messages or your OEM messaging? Is that your math, et cetera?

And most of the time, that is actually very true, in terms of what do people use the most. And so, then when we distill that to say, now for this generation, for 13-to-34, those things are all together in Snapchat, and that is their life. And that really, really helps with education.

As it pertains to AR, as you heard us all talk about today, there is a massive opportunity in AR. I think some of the developments that we’ve been making in AR to democratize the ability to make it either through creative partners, or through something like Camera Kit, for instance. Or even our ability to certify people within large advertising agencies on how to make AR for brands is really helping with
the adoption of AR, which I think previously was thought more of as something like really complex and hard to build. It no longer is complex and hard to build, but we need to educate there. So, those I would say are opportunities for us in terms of education, both on the audience itself, what they do on Snapchat day-to-day and on AR. But I can tell you that the story is absolutely resonating, and you’re seeing that show up. So those would be the top two.

And I’ll send it to Derek for the other.

DEREK ANDERSEN, CHIEF FINANCIAL OFFICER

Hi, there. Thanks for the questions. Derek speaking. I think a big thing I would say here as we’re thinking about the path forward on trajectory, we’re at different places with different platforms. But we’re very excited with momentum that we’ve seen in the last couple of quarters. So, if you think about the acceleration of the revenue to 52% in Q3, and then to 62%, in Q4 -- we’re really seeing the momentum in our platform. And we’re excited about where we are with our monetization platform in terms of the products and how they’re doing, they’re resonating. And clearly, that ties into what Jeremi just shared, and what she shared earlier today about what we’re hearing from our advertising partners. But we have different platforms at different stages, in terms of delivering against the hurdles over time. So, if you think about our Stories platform, which includes Discover, obviously, as I shared earlier, that is still very early, but the most mature of the group.

And then of course, Camera and the augmented reality platform is still in there. And those are the platforms that are really driving our momentum today. And when we’re thinking about our ability to deliver against what we talked about earlier, over the near and medium term, those are the platforms we’re really focused on.

But it’s exciting as you think about, over time, the ability to build upon what we’re seeing from an engagement point of view, Map, and then eventually, over time, also, Spotlight provides an incremental avenue to deliver and expand on our ARPU opportunity. So, as you’re thinking about the drivers over time, hopefully as you heard earlier, that can show a little bit bigger picture of what we see over time, both near term and in longer term.

BRIAN NOWAK, MORGAN STANLEY

Great. Thanks.

OPERATOR

The next question is from Michael Levine with Pivotal Research Group, please go ahead.
MICHAEL LEVINE, PIVOTAL

Just a question for both Jeremi and Derek. I thought the color you guys provided around international, especially as you’re going with partners into some of these emerging markets, is pretty, it’s actually pretty unique relative to your peers. Like, I’m curious, is there a, we’ve been in a market for X number of years, or we see a revenue opportunity of a certain revenue threshold where you’d look to flip the switch and really start to put more feet on the ground, as opposed to working with partners, as you were talking about in places like India and China.

JEREMI GORMAN, CHIEF BUSINESS OFFICER

Sure. Hi, Michael. Thanks for the question. Yeah, so it’s a couple of different things. So, in our more developing markets, like India, like you just mentioned, we are really firmly convicted around that partner strategy. We believe that the biggest opportunity for us right now in a market like India, is to continue to deliver on core product value, grow the audience, ensure that people love Snapchat, and then come in with feet on the street.

So, right now, we’re really very much at that early phase, and we’re working with an awesome partner there. They’ve been a longtime partner with us. And we truly believe that they feel like an extension of the Snap team. They wear Snap shirts, they’re very, very much utilizing our business-to-business marketing efforts and ensuring that customers in India are very clear with our value proposition.

And then we do deploy feet on the street as we get to a certain, I wouldn’t say at a time necessarily, and or a threshold, but really, when that core product value starts to take hold. And we feel very comfortable that the audience growth trajectory is what we want it to be, is when we’ll start to bring in feet on the street, which we do have a hybrid model in India today. In our more mature markets, so Western Europe is a good example of this, we’ve had feet on the street for a really long time.

And what we’re focused on right now is ensuring that we not only invest in growing those teams in the way that we have in North America over the last couple of years. Building out the sales team large enough so that we can do true verticalization and have that expertise that I talked about earlier today. But in addition, we know now based on what we’ve seen in the growth of North America, that just salespeople aren’t enough. We must support them with things like measurement, team members, with communications resources, with business-to-business marketing, in market. So, not just translation services, which we’ve been utilizing a bit before, but truly real market intelligence so that we’re speaking to the actual audience in those countries in the way that is localized, familiar, and relevant to them. And then, we’re going to continue to invest in our product marketing managers, for instance, to ensure that the rollout goes smoothly. So, in short, in the more developing markets, it’s really this hybrid strategy until we get to a place where community is ready for a full Snap monetization.
And then our more mature markets, where we have deep smartphone penetration, where our DAU is exceptional already, we will be investing and building out those support teams to ensure that we get those same results that we saw in North America over the last few years and those critically important markets to us.

OPERATOR

The next question is from Doug Anmuth with J. P. Morgan. Please go ahead.

DOUG ANMUTH, J. P. MORGAN

Great, thanks for taking the questions. I have two. First, Jeremi, you touched on the potential to shift the linear TV market, I was hoping you could dig in a little deeper there just on how Snap is positioned to get these dollars, and also what you’re hearing from marketers, just given that TV dollars have been slower to move than most expected even as viewership has declined.

And then Evan, Bobby mentioned Spectacles as an investment in the future and the devices will get better over time. We didn’t get a whole lot more there. But hoping you could give us a sense of how functionality could change and how we should think about timing there as well? Thanks.

JEREMI GORMAN, CHIEF BUSINESS OFFICER

Sure thing. Thanks for the question. So, I think what’s been the most important thing for us in terms of getting TV dollars, is to recognize the true opportunity in front of us. So, the rise of mobile content consumption and the decline of linear television are sort of at this x and y axis now, as everybody knows. But you’re right, the dollars are more challenging to ensure that we’re grabbing but it presents a huge opportunity for us.

With linear television being a $50 billion industry, we certainly believe, which eMarketer says that it is, we certainly believe that we have our place in there. Because the Snapchat Generation, it’s a large and unduplicated audience. They’re not watching linear television in the way that I’m used to, or the way that many of you are used to. They are watching television; it’s just happening in their pockets. So, brand marketers do want to spend time with their customers in the areas where they’re spending their most time, which is on their mobile phones.

So, in order to be specific about your question, like what are we doing to go after those dollars, and how are we winning? It’s a fairly simple strategy, which is that we are giving the video buyers what they want. We’ve hired a team of video experts with experience from places like ESPN and others, to come in and talk to mobile video buyers in the same way that they, and television buyers, in the same way
that they’ve been used to doing for years. And that is really resonating.

In addition, we’re giving them more engagement, we’re giving them ad effectiveness, and continued innovation in the ad product itself. And most importantly, we’re giving them really compelling content across our suite of video products, which oftentimes we talk about is just Discover, which is our hand curated brand safe environment. And that is really resonate with video buyers. But it also includes Stories, and eventually Spotlight. These are all video ecosystems within Snapchat.

So, we are now at feature parity with all of the other large players, when it comes to ad tech specifically, in video, and we’re continuing to innovate. We’ve launched goal-based bidding, we’ve launched un-skippable, six second, full screen video immersive experiences, and we’re truly giving them what they want. In addition, we educate them on the audience, what they’re doing there, and how we can actually reach the same audience with our awesome partners like NBC, like BuzzFeed, like SportsCenter, and others to ensure that they are getting the video experience but just on the smaller screen.

I think, to put it in context, what do advertisers want? They want people who are receptive to messages, they want large audiences, they want to ensure that they’re reaching people who either have spend or influence spend, and we have all of those things. And I think the most important thing that we can continue to educate our advertisers on is that we have those things at scale. So, when you talk about moving dollars to a platform where you have a fully engaged audience, you look at something like Will from Home, which was our original production with Will Smith. And between season one and season two of Will from Home, we had 43 million viewers of that show. And between season one and season two of Will from Home, we had 43 million viewers of that show. So, it’s really difficult to reach that kind of scale on linear and the more we talk about that story, the more we talk about how hand curated Discover is, in particular. And that is a brand-safe environment, the more we’re seeing those dollars move. But we believe in general, the video opportunity ahead of us is really huge because of the secular shifts that you’re seeing, generally.

EVAN SPIEGEL, CO-FOUNDER AND CHIEF EXECUTIVE OFFICER

Thanks for the question, Doug on Spectacle. I think the best way to think about it is a small bet on what the future of computing might look like. And so, we believe that there are generally huge transformational shifts in computing every decade or two, that are really these generational opportunities. Whether that’s moving from mainstream to desktop, or desktop, to mobile, these big shifts have unlocked huge opportunities to build new platforms, based on new behaviors.

You’ll notice that, for example, mobile phones didn’t replace desktops, but they created a totally different type of computing experience and unlocked an unbelievable explosion in communication, for example, that wasn’t possible before with desktop computing. So, I think overall, what we’re trying
to pay attention to, is that when these big computing shifts come along, it’s really important to at least make a bet on what that future could look like on the off chance that you’re successful and build one of these new platforms. And we actually believe we have the foundational tools to be successful there.

The three component parts to think about are: one, a really strong developer platform where people are able to access tools to build new computing experiences; two, a software platform where people can deploy what they build, to reach a really large audience; and three, hardware that enables new user experiences. And so, with Spectacles, we’ve effectively iterated through many generations of hardware devices, starting just with putting a computer on your face, evolving that, it’s a much more sophisticated capture.

More recently, making sure Spectacles, understand depth, understand the way that you see the world around you. And we’re actually able to overlay new experiences in 3D on top of that, because we understand the depth map of the environment. And as we’re looking to future product generations, we try to develop a hypothesis for each new hardware product that we release, so that we can continue to evolve that computing experience.

The exciting thing is that we’ve taken a different approach to other companies, because we’re trying to develop this augmented reality platform in partnership with creators. So, by releasing Spectacles on a continuous basis, collaborating with creators on what works for them, how we can better serve them by iterating on the hardware, I think positions us well as we go on this journey. But this is a multi-decade journey. I don’t think we’ll see widespread consumer adoption of new wearable hardware, maybe for 10 years or so. But what’s possible, using your hands to interact in a hands-free environment, using your eyes, using your voice, it unlocks a very different type of computing experience that just isn’t possible today, with your smartphone. So, it’s worth making a bet. And we think we’re well positioned to at least be a part of this massive transformation that’s on the horizon.

OPERATOR

The next question is from Richard Greenfield, with Lightshed Partners, please go ahead.

RICHARD GREENFIELD, LIGHTSHED

Hi. Question, sort of two questions. Let me start with the big picture one for Evan. Reed Hastings talks about Fortnite as a major competitor for Netflix, sort of that war for time question. I guess as you think about Fortnite or YouTube, or TikTok or Netflix – all the apps that your Snapchat Generation loves using. I guess, are these threats to Snapchat over time? Does it push you to diversify the content and offerings on Snapchat? Like, how do you think about that sort of battle for time?
And then, I have a follow up for Jeremi, on that chart that Derek showed, that just looked at sort of ARPU and revenue relative to Facebook. And I think Twitter was on that chart. Just wondering how much of the gap is this sheer number of small business advertisers. And how to think about a timeframe for closing that gap? They’re obviously 10 million plus, and you’re not. So, just how to think about the closing of that gap as a follow up. Thanks.

EVAN SPIEGEL, CO-FOUNDER AND CHIEF EXECUTIVE OFFICER

Hi, thanks first for the question. I think the best way to think about the competitive dynamics with time spent are really vis-à-vis other entertainment products, specifically. So, for example, Discover which monetizes with full screen video content is certainly competitive with other video services. Whether that’s a YouTube or a Netflix, TikTok, or even other forms of entertainment, like, Fortnite with gaming.

I think the interesting thing for us as we look at diversifying our business over time, is to also compete in areas that are really utility driven, that don’t actually derive value primarily from people spending time, but actually from people taking specific actions or converting to a purchase. For example, trying on augmented reality or taking action to connect with a business on our map.

And so, I think as you look at the whole opportunity on Snap over time, only part of that opportunity, really the entertainment piece of our business, is in direct competition with some of these platforms that are oriented around driving more time spent. But as we look at extending the utility of our business through AR and the map and our other different sorts of utilities, that those aren’t directly competitive in the same way.

JEREMI GORMAN, CHIEF BUSINESS OFFICER

I’ll take a quick answer here, and then turn it over to Derek to talk more about the ARPU gap. But our absolute opportunity is in the sheer volume of onboarding new advertisers. Most certainly, we have a lot of room to run there, globally, which is really exciting. Not specific to small/medium businesses necessarily, which I would define not necessarily as local only, although that is most certainly an opportunity with the advent of the map, although that’s still very early days. But truly just businesses in general, app install advertisers, eComm advertisers, more depth with our CPG advertisers, just the sheer volume of advertisers that come into the ecosystem is absolutely our opportunity here and the way that we’re going to close the gap.

Peter Sellis talked about this a little bit in his presentation, but it’s important to reiterate the flywheel that we’re talking about as we look to close that ARPU gap. As we onboard more advertisers and continue to invest in machine learning, measurement, optimization, at the same time, we have more
ads from which to choose, so that the ads can be more relevant to the customers, as they convert more. Therefore, even as the absolute CPM or eCPM goes up, the efficiency either stays the same or goes down. So, as we onboard more advertisers, that’s a huge opportunity in closing the gap. I will let Derek expound upon that if he would like to, but that’s, in short, my answer.

**DEREK ANDERSEN, CHIEF FINANCIAL OFFICER**

Sure, I can touch on a little bit. And I think, one of the things I would share in addition here is, is just thinking about this over time. So, Rich, this specific graphic you mentioned, was really focused on North America. And obviously, there’s growth beyond that, but obviously, one of the big keys here is even some of these more mature platforms are still generating approximately half of their revenue in North America. So, closing that gap is a big part of closing the ARPU gap over a longer-term period of time.

And then, when we think about our ability to close that gap, and how significant it is, it’s obviously a long journey. But different of our platforms are at different places at this current stage. So, if I start with the platforms that have really driven our momentum, we’ve accelerated revenue – as we’ve doubled revenue over the last two years. That’s really our Stories platform, which includes Discover, and our Camera platform, which includes the AR capability. And those are the platforms that, when we think about the near and medium term, and the ability to sustain our growth rates and begin to close that gap in a meaningful way, we’re really focused on those platforms today. But obviously, the map provides – as I said earlier – an on ramp to small and medium sized businesses over time, and so that contributes to the longer term opportunity. And as Jeremi mentioned, we’ll be focused on building utility there in the near term.

And then, of course, as I mentioned earlier, Spotlight is very exciting, but it’s very early. And so, we’re optimistic based on what we’re seeing in terms of the scale and the engagement there. But it’s very early and so we’re focused on the product experience there. But over time, that’s another avenue to contribute to a long-term opportunity, as we think about closing the gap over the longer term. So, hopefully that gives you a little bit of a sense of how we think about this in the near and medium turn, and then further into the long term.

**OPERATOR**

The next question is from Ross Sandler with Barclays, please go ahead.

**ROSS SANDLER, BARCLAYS**

Hi, guys, just wanted to go back to, like, where are the revenues coming from today. And Derek, you
just mentioned some of this, but maybe we can dig in a little deeper. So, if we look at the $2.5 billion that you did in 2020, it seems like you’re saying most of that came from Stories, Discover, and Camera. So, I guess first is, do you feel like you have a lot of ad load left in these three core areas? And if we look at doubling or tripling revenue from current levels, how do you think about ranking these existing three surfaces with the newer surfaces like Spotlight, Maps and Games? Which are you more bullish on, in terms of existing versus new? And then do you need all 265 million users to be active in these new surfaces in order to really unlock that potential? Or are they big enough today to already be meaningful contributors? Thank you.

DEREK ANDERSEN, CHIEF FINANCIAL OFFICER

Hi there, it’s Derek. I can start here. I think that, as I mentioned earlier, obviously, at this stage, as we’ve seen our revenue double over the last two years and the acceleration in recent quarters, definitely the Stories platform, which includes Discover is a very big part of that. And we see the opportunity to continue to grow there for years to come. It’s obviously a multiple story there. One is the building demand, as Jeremi mentioned earlier, for advertisers, very attractive ad units we have, like Commercials, which doubled year-over-year in each of the last four quarters. But this is also a story about our ability to continue to drive optimization and use our inventory that’s available to us, more efficiently. And I shared some use cases in our fourth quarter call about our ability to target more effectively as we grow the advertiser account, and how we were able to drive CPMs up, while driving down costs-per-pixel purchase, from an advertiser perspective.

And so, those things combined, which is growing the advertiser base in the overall product and our ability to continue to improve targeting, and our premium ad units really give us runway on that platform, in addition to obviously, growing engagement over time both here and abroad. And it’s very early in terms of us investing in premium content, and in our international markets as well. If I move over to the Camera, as I mentioned earlier, it’s very early for the Camera, but we are seeing momentum there. And that is the long-term opportunity we’re most excited about. We do believe the Camera represents multibillion-dollar platform in the long term.

I think the focus here is around building utility into the advertising product. And some of the momentum that we’re seeing that I mentioned earlier is really around how we’ve made it easier to start a campaign, easier to build creative, and the fact that those ads units have become more measurable in terms of being able to tie them directly to the actions that advertisers want to drive.

So, these two platforms, when we think about our ability to drive top line, over the next several years, are really what we’re focused on. And I think, as you mentioned, we have a lot of untapped potential beyond that. So, the map we talked about earlier, we’re very focused there on building utility for small businesses, on top of the large audience we’ve already built there. And we do see the map as a very
large, multibillion-dollar platform in the long term, but we’re focused on building utility for the Snapchat community and for the small businesses that populate our map in the near term.

And then I think, Spotlight we’ve touched on a couple of times here, but I would just say, it’s very early with Spotlight, but we’re excited about what we’re seeing in these early days, in terms of the size of the audience. And one of the things that’s exciting about Spotlight for the longer term, is the ability to unlock additional inventory – some of the ad units that are most in demand and highest yielding on the platform. And so, we think that’s an opportunity to expand the ARPU potential of business further and long term.

So, obviously, there’s a lot of opportunities as you start looking across the screens. In the near- and medium-term we’re very focused on driving top line on the Stories platform, Discover, and of course, capturing our opportunity on Camera with our AR platform, in order to build that into our biggest opportunity over the longer term. So, hopefully that gives you a little bit more color on where we see the growth coming from now, but also how we see the growth in the near and medium term.

OPERATOR

The next question is from Lloyd Walmsley with Deutsche Bank, please go ahead.

LLOYD WALMSLEY, DEUTSCHE BANK

Thanks. I have two, if I can. I guess for starters, thanks for hosting the day. It’s been a really helpful event. Evan, wanted to ask you about the intersection of AR and eCommerce. I think Peter talked about product try-on. And we’ve seen AR stores in the app. How far away are we from seeing AR driven eCommerce scale on the platform?

And the second one, sort of related to that, you’ve talked about pushing the AR Lens ads and performance objectives into the self-serve platform. Are you guys seeing adoption there from kind of smaller businesses or from even bigger businesses with more targeted buys around performance? Kind of what are you seeing there? And how far away are we from seeing that really scale as a revenue stream? Thanks.

EVAN SPIEGEL, CO-FOUNDER AND CHIEF EXECUTIVE OFFICER

Awesome. Thanks for the question. I’ll let Jeremi take the second part. I think it is really exciting to see retailers embrace augmented reality. It’s one of the first verticals we tackled with this augmented reality tooling that we have. So, what we’ve been doing is effectively going vertical by vertical and understanding how we can really solve problems for different types of businesses using AR. And I think AR in particular, when it comes to retail, has a couple really compelling characteristics.
One, I think it helps to evolve from transaction to experience. So, brands can not only show people what they look like while wearing the clothes, but really provide an experience that's emotional. And for a lot of brands, particularly in fashion or in beauty, that emotional connection to the brand is really, really important and helps with the sale process. So, I think augmented reality can help evolve from transaction to experience and power that in a totally new way.

I also think a lot of retailers are really excited about the potential for augmented reality to reduce returns in the future, which is obviously, a huge benefit in terms of cost savings, but also in terms of the environment. And so, we're doing a lot of work right now to iterate and experiment with retailers to think about ways to drive down returns by helping people find the right fit, find the right product using augmented reality. I would say there are some blockers to expanding and scaling that strategy right now. Largely, because asset creation is still a bit inefficient. So, that's something we've been innovating on as well and investing in. And I think, when resellers start seeing more and more ROI against their augmented reality investments, because, obviously, it improves conversion, but also because they can reduce things like returns, then I think, we're going to find even more momentum scaling up that sort of AR try-on, those sorts of AR experiences, despite the fact that there's increased friction relative to a Dynamic Product ad that, for example, just ingests a catalog and automatically creates advertising for you.

So, all of that to say that, we're very early, I think, in the development of augmented reality overall. But the results we've seen, tell us that if we can continue to drive efficiency, in terms of asset creation, and scaling these sorts of try-on experiences, that retailers will really reap the benefits from embracing this new technology.

JEREMI GORMAN, CHIEF BUSINESS OFFICER

As it comes to the adoption of the self-service tools for AR, we're seeing really great adoption of it, largely in part due to all of the innovations we're making in the ad tech stack. So, the ability to buy on a bidded basis, for instance, or the ability to bid on an outcome, like a KPI or a swipe or an audience, et cetera, has really accelerated the adoption of self-serve in AR. The vast, vast majority of our AR revenue does come through our self-serve tools now. And we're going to continue to innovate in this space to make it even more appealing for advertisers to do that. That's advertisers of all sizes are really adopting self-service as the primary way that they buy AR and all of our other products. And so, you'll continue to see more and more of that adoption, but we're really excited by what we're seeing so far.

OPERATOR

The next question is from Brent Thill with Jefferies. Please go ahead.
BRENT THILL, JEFFERIES

Thank you. For Evan and Derek, just going back to the 50% guidance. I think many investors are asking, why set that high a bar? Why not give yourself a little more wiggle room? Can you just talk to the confidence in what is underpinning you to be able to give that multiyear view?

DEREK ANDERSEN, CHIEF FINANCIAL OFFICER

Hi Brent, it's Derek speaking. I think the first thing I would share with you, is some of what I shared in my prepared remarks. One, we’re very focused on building on the momentum that we’ve had over the last couple of years. Obviously, doubling the revenue since 2018 and then the acceleration in the back half of 2020. And really seeing our ad platform and our ad products, mature in terms of the features and capabilities of the ad platform, but then also the adoption of our ad products by advertisers.

In terms of the ability looking forward, obviously, what I just shared in the prior question regarding where we see the Stories platform, including Discover, and our ability to continue to obviously not just grow engagement, but to also improve our targeting and optimization, which allows us to use our inventory more effectively, and therefore, continue to scale that platform over time, the momentum we’re seeing with some of our premium ad units, including the doubling year-over-year in the last four quarters for the Commercials ad product, obviously, we’re seeing momentum there. And we see the ability to continue to drive near and medium-term growth at attractive rates on that platform.

And then Camera, obviously, we’re excited about the opportunity that we’re seeing on the Camera, now. And I think the shift that you heard people talking about today in terms of the ability to make augmented reality advertising more measurable, more targeted, more ROI driven. And the fact that we’ve got the Camera being opened by 265 million Snapchatters, 30 times a day, to take 5 billion Snaps a day, the inventory opportunity, there is already immense. And the vast majority of those folks are using our AR product every day.

And so, as we continue to make those ad products more sophisticated, and more measurable and deliver return on ad spend, we’ll have a better opportunity to take advantage of that immense inventory potential. And then of course, as you look out longer term, we have these other platforms that we’ve not begun to monetize, that I’ve talked about today, including the Map, where we’re focused on building utility for local businesses now, as well as Spotlight, which it’s very early days for Spotlight but we are excited about the scale of the audience that we’ve begun to build there. And of course, the potential for that to unlock additional inventory of our most in demand and most premium ad units over time.
So, really, the focus is on scaling the business over time. And I think as you think about the near and medium term, it’s really about the Stories and the Discover platform, and the Camera and the augmented reality platforms and building on the momentum that we’re already seeing there, in order to turn that flywheel of better optimization and using our inventory, and therefore being able to drive up the CPMs, while still delivering really attractive return on ad spend to the advertisers.

And then longer term, we have these other platforms, like the Map and Spotlight that we can begin to unlock. And so, hopefully, that gives you a better sense of how we see the potential of the top line growth unfolding over both the near and medium term, and then into the longer term. And where we see that coming from and evolving over time.

So, hopefully, that additional color helps a little bit for your question.

OPERATOR

The next question is from Eric Sheridan with UBS. Please go ahead.

ERIC SHERIDAN, UBS

Thanks so much. Maybe coming back to some of the investments you feel you need to make as a company in the next couple of years. And getting Evan’s perspective, as well, just speaking about what you see as sort of mission critical against the broader goals you’ve laid out today. And then, Derek, maybe bringing it back to what you said during your slides about sort of mid 30s expense growth over the next couple of years, and how there could be some variability around that. Want to tie back together sort of the priority investments against what might be more variable and move around from year to year against your broader goals, or the outlook you laid out against the expense growth? Thanks.

EVAN SPIEGEL, CO-FOUNDER AND CHIEF EXECUTIVE OFFICER

Thanks for the question. I think in terms of the momentum we have in the core platform, we are really focused on continuing to build user engagement through communication, visual communication, which has really been transformational in the lives of our community, because they now prefer to communicate visually, rather than sending text messages and things like that. And so, we’re going to continue to try to onboard new members of our community through visual communication, and then broaden their engagement with products like Stories, or our Map, or Spotlight, Memories, and of course, our augmented reality platform.

And then what we’re going to try to do is develop a much richer toolset for all of the different
businesses and creators that use our platform. So, whether that’s through Lens Studio, helping people make much more sophisticated augmented reality experiences, or building better creative tools, so folks can create more entertaining content for Spotlight, that’s going to be a bulk of our investment.

And then, as I would say, as we look internationally, we’re definitely still playing catch up relative to the United States, and relative to the scale of our user base internationally. And so, we’ve got a lot of work to do to build out our sales teams, our partnerships teams, our content, all around the world. And so, that’ll be a big focus of ours over the next couple of years. And we’re excited that we finally gotten to this point. When we first went public, we were worried that we couldn’t afford to scale really rapidly outside of the United States. And we had some trepidation about doing that. And now, as we look at how we’ve been able to manage our cost structure, as we look at the engagement we’re seeing outside of the United States all around the world, we’re really excited about that opportunity. And there’s a big, I think, runway ahead of us to continue to grow.

DEREK ANDERSEN, CHIEF FINANCIAL OFFICER

Hi, and then I think just to fill in behind that, to provide some additional context. One, I did say and share in my prepared remarks, and you clearly picked up on it, we do intend to invest heavily in our business in the coming years. And we shared some very specific estimates around what we thought we’d see on the Opex side in 2021. I think the important thing here is that we’ve made a lot of financial progress over the last couple of years. I’ve talked a lot today about how we’ve scaled the top line. But nearly as importantly, we’ve driven approximately 47% of the incremental revenue over the last two years down to the adjusted EBITDA line. And so, that’s allowed us to, number one, achieve the goal we set for 2020, which was to achieve adjusted EBITDA profitability. But we’ve also been able to deliver significant improvement in free cash flow. So, we’re getting to a point where we’re on the verge of being able to self-fund our investments in the future of the business. And so, as we’ve gotten to that point, we’re now thinking about our investments in the future, in balance with what we believe we can deliver on the top line. So, that we can continue to make financial progress, but try to pull forward some of the investments in capturing our ARPU opportunity and our long-term product opportunity, including AR and content and the growth in our community.

And so, when we look forward to this coming year, and we’re talking about the investments we’ll be making, in all of the things that you heard about today, that does mean we’re going to be investing in content. And certainly, we’re doing that in the near term in a fairly significant way in the support of the launch of Spotlight. And obviously, we’re excited about the early returns we’re seeing there, but it is a big investment. And we’re trying to grow our variable costs as efficiently as we can by scaling efficiently alongside that to drive out the gross margin.
And you’ve seen us balancing these things in the last couple of years where we’ve been investing in content but scaling efficiently. And so, we were able to add 19 percentage points to the adjusted gross margins in the last two years by scaling efficiently alongside those big investments. Now, obviously, we expect that margin expansion to be much slower in the near term as we make these big investments to support the launch of Spotlight, but we’re excited about the returns we’re seeing in the early days.

And then on the Opex side, obviously, to deliver all of the product roadmap that you saw today, and to capture our ARPU opportunity, we’re going to be making significant investments in our team, both on the engineering and product side, to bring forward each of the platforms you saw today and deliver the AR future. But also, on our sales and support teams that are going to allow us to grow our advertiser base and support our advertisers over time, including the investments we want to make internationally to really build up in a way that we did in the United States in more recent years.

And then, of course, marketing, both investments in marketing to support our partnerships with advertisers and grow our advertiser base, but also to help seed our growth in some of the international communities that we’ve talked about as being our focus for the time forward.

So, I really hope that one of the things you’ll take away from today is that we are looking to achieve a level of balance here, where as we become more confident in our ability to deliver the top line, we’re going to invest in the business alongside that in order to capture our opportunity. And seek to continue to make financial progress while doing those two things together. And so, hopefully, that gives you a little perspective about how we think about investing in the business, in addition to what specifically we’re focusing those investments on.

OPERATOR

Our last question today comes from Heath Terry with Goldman Sachs, please go ahead.

HEATH TERRY, GOLDMAN SACHS

Great, thanks. Evan, you’ve obviously come through a period of significant innovation in terms of products and ad services. You referenced earlier, in one of your answers, the forward product roadmap. I guess, just obviously not expecting you to announce any of those products here. But just how would you characterize it in terms of the scale of what you’re seeing in front of you versus what we’ve seen in the last couple of years? And to the extent that there’s any high level or even lower sort of shift in focus that you’ve gotten to, to this point, in terms of your priorities?
Evan Spiegel, Co-Founder and Chief Executive Officer

Yes. Thanks for the question. So, I think largely, the platform itself has been roughly sketched out. I’d say that different aspects of the business are in varying stages of their development. So, Stories, for example, which has been around maybe the longest of all of our platforms, is much more mature. So, it’s a big business for us. We’re continuing to develop tools for advertisers and our content partners to make better content. Augmented reality is maybe a couple years behind Stories, but huge amount of headroom there. Again, building a lot of tools for our creator partners, and of course, for advertisers.

And then you look at different parts of our platform, like, the Map, which is just in the early stages of becoming more of a platform by onboarding businesses, helping people take action to connect with those businesses. Or things like Spotlight, which is actually just a couple months old, and still really in its early product development phase. So, I would say, the different parts of the service, while they are pretty clearly outlined at this point, are definitely in varying stages of their development, overall.

I think the exciting opportunity for us in the coming years, as each of those discrete platforms evolves, will be connecting them together. And I think that’s really where the powerful opportunities are, connecting the map to our augmented reality products, connecting our augmented reality experiences, to the ways that people make content to help inspire them, and help them build more interesting creative tools. So, the way that the platform links together, of course, with things like communication, so that people can share all these experiences really easily, those are things we’re really excited about. And that’s maybe the way to think about how we connect the dots three-to-five years out from now.

So, I’d say like the core building blocks are there, across the application. And a lot of the work that we’re doing now is evolving each of those platforms. And then a little bit later on, connecting all of them together, which we think will create a very unique and cohesive user experience that allows people to do things that are not possible today in a more siloed app environment.

And I guess that’s the last question. It’s probably a good time for me to say thank you so much for joining all of us today. We’re really grateful that you spent time with us and we look forward to seeing you all soon. Thanks so much.