

Amazon.com, Inc. (NASDAQ:[AMZN](#)) Q1 2024 Earnings Conference Call April 30, 2024 5:30 PM ET

## **Company Participants**

Dave Fildes - Vice President, Investor Relations  
Andy Jassy - Chief Executive Officer  
Brian Olsavsky - Chief Financial Officer

## **Conference Call Participants**

Doug Anmuth - JPMorgan  
Ross Sandler - Barclays  
Brian Nowak - Morgan Stanley  
Youssef Squali - Truist Securities  
Justin Post - Bank of America  
Ron Josey - Citi

## **Operator**

Thank you for standing by. Good day, everyone, and welcome to the Amazon.com First Quarter 2024 Financial Results Teleconference. At this time, all participants are in a listen-only mode. After a presentation, we'll conduct a question-and-answer session. Today's call is being recorded.

And for opening remarks, I will be turning the call over to the Vice President of Investor Relations, Mr. Dave Fildes. Please go ahead.

## **Dave Fildes**

Hello, and welcome to our Q1 2024 financial results conference call. Joining us today to answer your questions is Andy Jassy, our CEO; and Brian Olsavsky, our CFO. As you listen to today's conference call, we encourage you to have our press release in front of you, which includes our financial results, as well as metrics and commentary on the quarter.

Please note, unless otherwise stated, all comparisons in this call will be against our results for the comparable period of 2023. Our comments and responses to your questions reflect management's views as of today, April 30, 2024, only, and will include forward-looking statements.

Actual results may differ materially. Additional information about factors that could potentially impact our financial results is included in today's press release and our filings with the SEC, including our most recent annual report on Form 10-K and subsequent filings.

During this call, we may discuss certain non-GAAP financial measures. In our press release, slides accompanying this webcast, and our filings with the SEC, each of which is posted on our

IR website, you will find additional disclosures regarding these non-GAAP measures, including reconciliations of these measures with comparable GAAP measures.

Our guidance incorporates the order trends that we've seen to date and what we believe today to be appropriate assumptions. Our results are inherently unpredictable and may be materially affected by many factors, including fluctuations in foreign exchange rates, changes in global economic and geopolitical conditions and customer demand and spending, including the impact of recessionary fears, inflation, interest rates, regional labor market constraints, world events, the rate of growth of the Internet, online commerce, cloud services and new and emerging technologies, and the various factors detailed in our filings with the SEC.

Our guidance assumes, among other things, that we don't conclude any additional business acquisitions, restructurings or legal settlements. It's not possible to accurately predict demand for our goods and services, and therefore, our actual results could differ materially from our guidance.

And now I'll turn the call over to Andy.

**Andy Jassy**

Thanks, Dave. Today, we're reporting \$143.3 billion in revenue, up 13% year-over-year, excluding the impact from foreign exchange rates; \$15.3 billion in operating income, up 221% year-over-year or \$10.5 billion; and \$48.8 billion in trailing 12-month free cash flow adjusted for equipment finance leases, up \$53.2 billion year-over-year.

We remain focused on driving better experiences for our customers while also delivering efficiency improvements. Our financial results are an encouraging reminder of the progress we're making. Starting with our stores business, despite having hundreds of millions of items and the broadest selection available, we remain intensely focused on adding even more selection.

One way is to continue adding brands we know our customers want. For instance, in the U.S., we recently welcomed Clinique and two Gen Z fashion favorites, Parade and Cider, and announced a collaboration with Hardly Ever Worn It in Europe to offer customers pre-owned items from luxury brands.

Another way to drive selection is to make it easier for our third-party sellers to add their products to our store. We've recently launched a new generative AI tool that enables sellers to simply provide a URL to their own website, and we automatically create high-quality product detail pages on Amazon. Already, over 100,000 of our selling partners have used one or more of our GenAI tools.

We remain focused on making sure we're offering everyday low prices, which we know is even more important to our customers in this uncertain economic environment. As our results show, customers are shopping, but remain cautious, trading down on price when they can and seeking out deals. In Q1, we helped customers save with shopping events worldwide, including our first

big spring sale in Canada and the U.S. We also held spring deal days in Europe and our Ramadan event in Egypt, Saudi Arabia, and the UAE. Delivery speed really matters to customers, and we've continued to get faster while improving our safety performance.

In this past Q1, we delivered to Prime members at our fastest speeds ever. In March, across our top 60 largest U.S. metro areas, nearly 60% of Prime members orders arrived the same or next day. And globally, in cities like Toronto, London, and Tokyo, about three out of four items were delivered the same or next day. Faster delivery times have another important effect. As we get items to customers this fast, customers choose Amazon to fulfill their shopping needs more frequently, and we can see the results in various areas, including how fast our Everyday Essentials business is growing and the continued increase in Prime member purchase frequency and total spend with us.

Over the past year, we've talked about how our regionalization efforts have helped to lower our cost to serve. We've continued to inspect our fulfillment network for additional opportunities and are working on several areas where we believe we can lower costs even further while also improving customer experience. One example of this is our work to increase the consolidation of units into fewer boxes. As we further optimize our network, we've seen an increase in the number of units delivered per box, an important driver for reducing our cost.

When we're able to consolidate more units into a box, it results in fewer boxes and deliveries, a better customer experience, reduces our cost to serve, and lowers our carbon impact. Another prominent example is our efforts to revamp our U.S. inbound fulfillment architecture to allow for better inventory placement closer to our customers. This will be an iterative process throughout the year as we work with sellers and retail partners, and teams are making good progress on their plans.

Advertising performance remained strong with ad sales up 24% year-over-year, excluding the impact of foreign exchange. The strength in advertising was primarily driven by sponsored products, supported by continued improvements in relevancy and measurement capabilities for advertisers. We still see significant opportunity ahead in our sponsored products, as well as areas where we're just getting started like Prime Video ads.

Prime Video ads offers brands value as we can better link the impact of streaming TV advertising to business outcomes like product sales or subscription sign-ups, whether the brands sell on Amazon or not. It's very early for streaming TV ads but we're encouraged by the early response.

Moving to AWS. Year-over-year revenue growth accelerated to 17.2% in Q1, up from 13.2% in Q4. It's useful to remember that year-over-year percentages are only relevant relative to the total base from which you start. And given our much larger infrastructure cloud computing base, at this growth rate, we see more absolute dollar growth again quarter-over-quarter in AWS than we can see elsewhere.

We're seeing a few trends right now. First, companies have largely completed the lion's share of their cost optimization and turned their attention to newer initiatives. Before the pandemic, companies were marching to modernize their infrastructure, moving from on-premises infrastructure to the cloud to save money, innovated at a more rapid rate, and to drive more developer productivity. The pandemic and uncertain economy that followed distracted from that momentum, but it's picking up again.

Companies are pursuing this relatively low-hanging fruit in modernizing their infrastructure. And with the broadest functionality by a fair bit, deepest partner ecosystem and strong security and operational performance, AWS continues to be their strong partner of choice.

Our AWS customers are also quite excited about leveraging Gen AI to change the customer experiences and businesses. We see considerable momentum on the AI front where we've accumulated a multibillion-dollar revenue run rate already.

You heard me talk about our approach before, and we continue to add capabilities at all three layers of the Gen AI stack. At the bottom layer, which is for developers and companies building models themselves, we see excitement about our offerings.

We have the broadest selection of NVIDIA compute instances around, but demand for our custom silicon, training, and inference is quite high, given its favorable price performance benefits relative to available alternatives.

Larger quantities of our latest generation, Trainium 2 is coming in the second half of 2024 and early 2025. Companies are also starting to talk about the eye-opening results they're getting using SageMaker, our managed end-to-end service has been a game changer for developers in preparing their data for AI, managing experiments, training models faster, lowering inference latency, and improving developer productivity.

Perplexity AI trains models 40% faster than SageMaker, Workday reduces inference latency by 80% with SageMaker, and NatWest reduces its time to value for AI from 12 to 18 months to under seven months using SageMaker. This change is how challenging it is to build your own models, and we see an increasing number of model builders standardizing on SageMaker.

The middle layer of the stack is for developers and companies who prefer not to build models from scratch, but rather seek to leverage an existing large language model, or LLM, customize it with their own data, and have the easiest and best features available to deploy secure high-quality, low-latency, cost-effective production Gen AI apps.

This is why we built Amazon Bedrock, which not only has the broadest selection of LLMs available to customers, but also unusually compelling model evaluation, retrieval augmented generation, or RAG, to expand model's knowledge base, guardrails to safeguard what questions applications will answer, agents to complete multistep tasks, and fine-tuning to keep teaching and refining models.

Bedrock already has tens of thousands of customers, including Adidas, New York Stock Exchange, Pfizer, Ryanair, and Toyota. In the last few months, Bedrock's added Anthropic's Claude 3 models, the best-performing models in the planet right now; Meta's Llama 3 models; Mistral's Various models, Cohere's newest models, and new first-party Amazon Titan models.

A week ago, Bedrock launched a series of other features, but perhaps most importantly, Custom Model Import. Custom Model Import is a sneaky big launch as it satisfies a customer request we've heard frequently and that nobody has yet met.

As increasingly more customers are using SageMaker to build their models, they're wanting to take advantage of all the Bedrock features I mentioned earlier that make it so much easier to build high-quality production-grade Gen AI apps.

Bedrock Custom Model Import makes it simple to import models from SageMaker or elsewhere into Bedrock before deploying their applications. Customers are excited about this, and as more companies find they're employing a mix of custom-built models along with leveraging existing LLMs, the prospect of these two linchpins services in SageMaker and Bedrock working well together is quite appealing.

The top of the stack are the Gen AI applications being built. And today, we announced the general availability of Amazon Q, the most capable generative AI-powered assistant for software development and leveraging company's internal data.

On the software development side, Q doesn't just generate code, it also tests code, debugs coding conflicts, and transforms code from one form to another. Today, developers can save months using Q to move from older versions of Java to newer, more secure and capable ones.

In the near future, Q will help developers transform their dotNET code as well, helping them move from Windows to Linux. Q also has a unique capability called Agents, which can autonomously perform a range of tasks, everything from implementing features, documenting, and refactoring code to performing software upgrades.

Developers can simply ask Amazon Q to implement an application feature such as asking it to create an add to favorites feature in a social sharing app, and the agent will analyze their existing application code and generate a step-by-step implementation plan, including code changes across multiple files and suggested new functions. Developers can collaborate with the agent to review and iterate on the plan, and then the agent implements it, connecting multiple steps together and applying updates across multiple files, code blocks and test suites. It's quite handy.

On the internal data side, most companies have large troves of internally relevant data that resides in wikis, Internet pages, Salesforce, storage repositories like Amazon S3 and a bevy of other data stores and SaaS apps that are hard to access. It makes answering straightforward questions about company policies, products, business results, code, people, and many other topics hard and frustrating. Q makes this much simpler. You can point Q at all of your enterprise

data repositories. And it will search all this data, summarize logically, analyze trends, engage in dialogue with customers about this data.

We also introduced today a powerful new capability called Q Apps, which lets employees describe a natural language what apps they want to build on top of this internal data and Q Apps will quickly generate that app. This is going to make it so much easier for internal teams to build useful apps from their own data. Q is not only the most functionally capable AI-powered assistant for software development and data, but also setting the standard for performance. Q has the highest-known score and acceptance rate for code suggestions, outperforms all other publicly benchmarkable competitors and catching security vulnerabilities, and leads all software development assistants on connecting multiple steps together and applying automatic actions.

Customers are gravitating to Q, and we already see companies like Brightcove, Bridge Telecom, Datadog, GitLab, GoDaddy, National Australia Bank, NCS, Netsmart, Slam, Smartsheet, Sun Life, Tata Consultancy Services, Toyota, and Wiz using Q, and we've only been in beta until today.

I'd also caution folks not to overlook the security and operational performance elements of these gen AI services. It's less sexy, but critically important. Most companies care deeply about the privacy of the data in their AI applications and the reliability of their training and production apps.

If you've been paying attention to what's been happening in the last year or so, you can see there are big differences between providers on these dimensions. AWS has a meaningful edge, which is adding to the number of companies moving their AI focus to AWS. We expect the combination of AWS' reaccelerating growth and high demand for gen AI to meaningfully increase year-over-year capital expenditures in 2024, which given the way the AWS business model works is a positive sign of the future growth. The more demand AWS has, the more we have to procure new data centers, power and hardware.

And as a reminder, we spend most of the capital upfront. But as you've seen over the last several years, we make that up in operating margin and free cash flow down the road as demand steadies out. And we don't spend the capital without very clear signals that we can monetize it this way.

We remain very bullish on AWS. We're at \$100 billion-plus annualized revenue run rate, yet 85% or more of the global IT spend remains on-premises. And this is before you even calculate gen AI, most of which will be created over the next 10 to 20 years from scratch and on the cloud. There is a very large opportunity in front of us.

We also continue to make strong progress on our newer investments. Our emerging international stores are growing and moving towards profitability. Our third-party logistics business offering services like Buy with Prime, Amazon shipping and multichannel fulfillment continues to grow well. We just launched a Prime delivery grocery benefit that lets customers receive free unlimited grocery delivery for just \$9.99 a month, which is great value and customers are responding accordingly. Later this year in Manhattan, we're launching a new

smaller Whole Foods market concept called Whole Foods Market Daily Shop. Prime Video continues to produce compelling content with Fallout being our latest big hit on the heels of a very successful Roadhouse movie, with strong customer engagement in our original and partner content.

Our health services business is growing robustly as customers are loving our pharmacy customer experience, and we've launched same-day delivery of prescription medications to customers in eight cities, including Los Angeles and New York City, with plans to expand to more than a dozen cities by the end of the year with customers now getting first fill medications 75% faster year-over-year nationwide.

And Kuiper is getting closer to having its production satellites in space and entering our commercial data. There's a lot of invention happening across our business, and I'm super grateful to all our employees for their hard work and ingenuity. I'll close by sharing that I'm enthusiastic about how we started this year. We have a lot of opportunity in front of us in every one of our businesses to make our customers' lives better and easier.

With that, I'll turn it over to Brian for a financial update.

### **Brian Olsavsky**

Thanks, Andy. Starting with our top line financial results. Worldwide revenue was \$143.3 billion, representing a 13% increase year-over-year, excluding the impact of foreign exchange and near the top end of our guidance range. I'd like to highlight a couple of points to help you interpret our growth rates.

First, we saw an impact from leap year in Q1, which added approximately 120 basis points to the year-over-year quarterly revenue growth rate. Second, while I typically talk about growth rates, excluding the impact of year-over-year changes in foreign exchange, we did see an unfavorable impact from global currencies weakening against the US dollar, more than we had planned in Q1. This led to a \$700 million or 50 basis point headwind to revenue relative to what we guided. Excluding this FX headwind, we would have exceeded the top end of our guidance range.

Worldwide operating income was \$15.3 billion, which was our highest quarterly income ever, and it was \$3.3 billion above the high end of our guidance range. This was driven by strong operational performance across all three reportable segments and better-than-expected operating leverage, including lower cost to serve. The impact on operating income from our Q1 FX rate headwind was negligible. I'll speak more to our profitability trends in a moment.

In the North America segment, first quarter revenue was \$86.3 billion, an increase of 12% year-over-year. In the international segment, revenue was \$31.9 billion, an increase of 11% year-over-year, excluding the impact of foreign exchange. We remain focused on the inputs that matter most to our customers: selection, price, and convenience.

During the quarter, around the world, we help customers save with our shopping events. We added selection, including premium and luxury brands, and we delivered our fastest speeds ever for Prime members. Third-party sellers continue to be an important part of our offering. Third-party seller services revenue increased 16% year-over-year, excluding the impact of foreign exchange. We saw strong 3P unit growth, coupled with increased adoption of our optional services, such as fulfillment and global logistics. For the quarter, third-party seller unit mix was 61%, up 200 basis points year-over-year.

Shifting to profitability, North America segment operating income was \$5 billion, an increase of \$4.1 billion year-over-year. Operating margin was 5.8%, up 460 basis points year-over-year. We saw improvements in our cost to serve, including continued benefit from our work to regionalize our operations, savings from more consolidated customer shipments, and improved leverage driven by strong unit growth and lower transportation rates.

In our international segment, operating income was \$903 million, an improvement of \$2.2 billion year-over-year. Operating margin was 2.8%, up 710 basis points year-over-year. This is primarily driven by our established countries as we improve cost efficiencies through network design enhancements and improved volume leverage. Additionally, we saw good progress in our emerging countries as they expand their customer offerings and make strides on their respective journeys to profitability.

Looking ahead, we see several opportunities to further lower cost to serve and improved profitability in our worldwide stores business while still investing to improve the customer experience. Within our fulfillment network, we are focused on investing in our inbound network, streamlining and standardizing process paths, and adding robotics and automation. These improvement opportunities will take time. However, we have a solid plan in place and we like the path we're on.

Advertising remains an important contributor to profitability in North America and international segments. We see many opportunities to grow our offerings, both in the areas that are driving growth today like sponsored products and in areas that are newer, like streaming TV ads.

Moving to AWS. Revenue was \$25 billion, an increase of 17% year-over-year, and AWS is now a \$100 billion annualized revenue run rate business. Excluding the impact from leap year, AWS revenue increased approximately 16% year-over-year.

During the first quarter, we saw growth in both generative AI and non-generative AI workloads across a diverse group of customers and across industries as companies are shifting their focus towards driving innovation and bringing new workloads to the cloud. Additionally, we continue to see the impact of cost optimizations diminish. While there always be a level of ongoing optimization, we think the majority of the recent cycle is behind us, and we're likely closer to a steady state of these optimization efforts.

AWS operating income was \$9.4 billion, an increase of \$4.3 billion year-over-year. As a reminder, these results include the impact from the change in the estimated useful life of our



servers, which primarily benefits the AWS segment. We made progress in managing our infrastructure and fixed costs while still growing at a healthy rate, which has resulted in improved leverage.

As we've said in the past, over time, we expect the AWS operating margins to fluctuate, driven in part by the level of investments we are making in the business. We remain focused on driving efficiencies across the business, which enables us to invest to support the strong growth we're seeing in AWS, including generative AI, which brings us to capital investments. As a reminder, we define these as the combination of CapEx plus equipment finance leases.

In 2023, overall capital investments were \$48.4 billion. As I mentioned, we're seeing strong AWS demand in both generative AI and our non-generative AI workloads, with customers signing up for longer deals, making bigger commitments. Still relatively early days in generative AI and more broadly, the cloud space, and we see sizable opportunity for growth.

We anticipate our overall capital expenditures to meaningfully increase year-over-year in 2024, primarily driven by higher infrastructure CapEx to support growth in AWS, including generative AI.

Turning to our revenue guidance for Q2. Net sales are expected to be between \$144 billion and \$149 billion or to grow between 7% and 11%, compared with the second quarter of 2023. We saw an unfavorable impact from year-over-year changes in foreign exchange in our Q1 results, and we expect that headwind to grow in the second quarter.

Our Q2 net sales guidance anticipates an unfavorable foreign exchange impact of approximately 60 basis points. As part of our guidance considerations, we also continue to keep an eye on consumer spending and macro level trends, specifically in Europe, where it appears to be a bit weaker relative to the US.

Operating income is expected to be between \$10 billion and \$14 billion in Q2. This estimate includes the impact of our seasonal step-up in stock-based compensation expense, driven by the timing of our annual compensation cycle.

I want to thank our customers, our partners, and our teammates around the world for a very strong start to the year, and we're excited to build on this momentum. We'll remain focused on streamlining and prioritizing projects in a way that allows us to continue inventing for customers in a cost-effective way.

With that, let's move on to your questions.

## **Question-and-Answer Session**

**Operator**

At this time, we will now open the call up for questions. [Operator Instructions] Thank you. Our first question comes from the line of Doug Anmuth with JPMorgan. Please proceed with your question.

**Doug Anmuth**

Thanks so much for taking the question. Probably for both Andy and Brian. Historically, Amazon has shifted between periods of heavy investment and then margin expansion back into heavier investment, but you now have a much bigger base of gross profit and overall operating income. As you think about GenAI and capital intensity or grocery or cyber or healthcare, is there anything from an investment perspective that could materially impact profitability going forward in your view? Thanks.

**Brian Olsavsky**

Hi. Doug, yeah, we have historically always mentioned that. You have seen like a pendulum shift sometimes between profitability and investment. I think we're at the stage now where we're doing both at the same time continually, so we are more apt to talk about the specific investments that we're making and how that might impact our short-term outlook.

So if you look at the progress we've made on operating income and free cash flow over really the last 18 months, a lot of it's driven by improvements in our stores business, lower cost to serve. We've talked about regionalization efforts and how that's moving into inbound areas now.

Advertising has been growing strong and AWS has been strong. And you saw AWS margins increase 800 basis points sequentially off Q4. A lot of that's driven by cost controls and expanding revenue on the top line and lower cost structure throughout the company.

We do see, though, on the CapEx side that we will be meaningfully stepping up our CapEx and the majority of that will be in our -- to support AWS infrastructure and specifically generative AI efforts. So I would expect that, that will increase -- it will increase depreciation, definitely in that segment.

On the -- well, we're talking about CapEx. Right now, in Q1, we had \$14 billion of CapEx. We expect that to be the low quarter for the year. As Andy said earlier, we are seeing strong demand signals from our customers and longer deals and larger commitments, many with generative AI components. So those signals are giving us confidence in our expansion of capital in this area. And as he also mentioned, we've done this for 18 years. We invest capital and resources upfront. We create capacity very carefully for our customers. And then we see the revenue, operating income and free cash flow benefit for years to come after that, with strong returns on invested capital. So a little bit of a long-winded answer to your question.

But yes, we have -- the main issue that we'll see in the near term is additional CapEx and we've talked about that. And we continue to see strong CapEx performance in our stores business. Most of that will be related to modest capital or capacity increases in addition to our same-day

fulfillment network and some Amazon Logistics upgrades to the fleet. But for the most part, what you'll see is really going to be on the AWS side.

### **Andy Jassy**

Yes, I just would add briefly, just to summarize. I understand where the question is coming from, Doug. And I think we're in a position to do both is the short answer. I think there's actually an opportunity in our existing large businesses in the stores business along with advertising and AWS, there's a lot of growth in front of us. And I think we're investing in a meaningful way. But I think we also -- we've been pretty consistent about don't believe that we're at the end of what we can do in terms of improving our cost structure on the store side.

Yes, I think there are really unbelievable growth opportunities in front of us. And I think what people sometimes forget on the AWS side, it's a \$100 billion revenue run rate business, that we're still 85-plus percent of the global IT spend is on premises. And if you believe that equation is going to flip, which we do, it means we have a lot of growth in front of us, and that's before the generative AI opportunity, which I don't know if any of us have seen a possibility like this in technology in a really long time, for sure, since the cloud, perhaps since the Internet.

And unlike in the cloud, where so much -- there's a lot of work to be done to move from on-premises to the cloud, people do it and they get value out of it, which is why they modernize their infrastructure. But it's work. All of this generative AI set of workloads, which will transform every experience they're going to be built from scratch on the cloud largely. And so it's just tremendous opportunities there along with some of the other areas that we're investing that are really early stage. So I think it's both for us.

### **Operator**

And our next question comes from the line of Ross Sandler with Barclays. Please proceed with your question.

### **Ross Sandler**

Hey, guys. Somewhat related question on CapEx intensity in AWS. So I think the CEO of Anthropic has said that I think the next generation of models, costs in the neighborhood of \$1 billion to train. This would be like Cloud 4, I guess, high end. And then the generation after that might be as much as \$10 billion to train. So is this something that you feel like the industry will do on top of AWS? Do you feel like Olympus and some of the stuff you're doing in-house needs to kind of stay at the state-of-the-art, or can others do that? And then how much did all this training have an impact on the acceleration that you saw in 1Q for AWS revenue? Thank you.

### **Andy Jassy**

Well, Ross, I would tell you that we have seen kind of three, I'll call it, macro trends that I think are contributing to AWS' performance, at least in the last quarter. I think -- first of all, I think the

lion's share of cost optimization is behind us. So, I think companies will be smart and have learned a lot over the last number of months in how they run their infrastructure in the cloud.

But I think the lion's share of the cost optimization is behind us. And I think people have moved to newer initiatives that I would, at a macro level, describe as modernizing their infrastructure and then trying to drive value at a generative.

On the former, I think we were on this March before the pandemic, where most companies were trying to figure out how to move from on-premises to the cloud because it's more cost effective and it's faster to innovate and they get real developer productivity.

And then the pandemic hit and people were in survival mode and the uncertain economy, you let people save costs wherever they could, and they got distracted on that. But they're back to pursuing and figuring it out because it's low-hanging fruit for them, and we see very significant growth in that space. And at the same time, we're seeing very significant momentum in people trying to figure out how to run their generative AI on top of AWS.

I mentioned we have a multibillion-dollar revenue run rate that we see in AI already, and it's still relatively early days. And I think that there's -- at a high level, there's a few things that we're seeing that's driving that growth.

I think first of all, there are so many companies that are still building their models. And these range from the largest foundational model builders like Anthropic, you mentioned, to every 12 to 18 months or building new models. And those models consume an incredible amount of data with a lot of tokens, and they're significant to actually go train.

And a lot of those are being built on top of AWS, and I expect an increasing amount of those to be built on AWS over time because our operational performance and security and -- as well as our chips, both what we offer from NVIDIA. But if you take Anthropic, as an example, they're training their future models on our custom silicon on Trainium.

And so I think we'll have a real opportunity for a lot of those models to run on top of AWS. I think the thing that people sometimes don't realize is that while we're in the stage that so many companies are spending money training models.

Once you get those models into production, which not that many companies have, but when you think about how many generative AI applications will be out there over time, most will end up being in production when you see the significant run rates.

You spend much more in inference than you do in training because you train only periodically, but you're spinning out predictions and inferences all the time. And so we also see quite a few companies that are building their generative AI applications to do inference on top of AWS. And a lot of it has to do with the services. And the primary example we see there is how many companies, tens of thousands of companies, already are building on top of Amazon Bedrock, which has the largest selection of large language models around and a set of features that

make it so much easier to build a high-quality, cost-effective low latency, production-grade generative AI applications.

So, we see both training and inference being really big drivers on top of AWS. And then you layer on top of that the fact that so many companies, their models and these generative AI applications are going to have their most sensitive assets and data. And it's going to matter a lot to them what kind of security they get around those applications. And yes, if you just pay attention to what's been happening over the last year or two, not all the providers have the same track record. And we have a meaningful edge on the AWS side so that as companies are now getting into the phase of seriously experimenting and then actually deploying these applications to production, people want to run their generative AI on top of AWS.

### **Operator**

And the next question comes from the line of Brian Nowak with Morgan Stanley. Please proceed.

### **Brian Nowak**

Great. Thanks for taking my questions. I have two. The first one is on cost to serve. I appreciate all the color in the shareholder letter and even tonight on cost to serve. Andy, maybe could you just help us quantify a little more how to think about some of your North Star cost to serve goals over the next couple of years? And what could that mean for potential accompanying reasonable ranges of outcomes for North America retail margins through all of that?

And then the second one, if cost to serve does improve, I think it should lead to significant incremental cash flow even with more CapEx. So just remind us again how you sort of think through the philosophy of returning capital to shareholders in addition to continuing to invest for the long run? Thanks.

### **Brian Olsavsky**

Hey, Brian, this is Brian. I will start with your second question. So as far as dividends or buybacks or any other capital structure moves, we don't have anything to share with you on that today. But I'll reacquaint you with our general philosophy. So our first priority is to invest in -- to support the growth opportunities and long-term investments within our businesses. And generally, we still have many opportunities to put that capital to use that would generate meaningful returns, especially as you heard in generative AI. So we're very -- we have a great deal of passion on that and conviction on that as well.

We are reaching a different stage of free cash flow. As you mentioned, we had negative free cash flow for two years, 2021 and 2022, immediately after the pandemic as we had doubled the size of our operations network and had a lot of other expenses. That was followed by 2023 when we had our largest -- our highest free cash flow ever. And those trends have carried into Q1. So we feel good about the free cash flow. We are, again, still anticipating higher CapEx this year.

The other thing that we're doing with cash flow right now is we're repaying some of the debt that we had taken on during that negative free cash flow period. We have reached a high watermark at the end of Q1 last year. And since then and then through this year, we'll pay that down over \$25 billion. So that's our first priority as well as 2024 capital expenditures, but otherwise, nothing to share on that front.

I'll tee up, Andy, on the stores profitability because I know there's always generally the comment about how high can operating margins go and how do they compare to historic trends. And I think the same still holds. We look back to before the pandemic, and we say, first, we can achieve those operating margins even without the impact of advertising.

And we're not quite there yet. But we're not limiting ourselves to that. We're looking for ways to, again, turn over every rock, look at every process and everything that we do on the logistics side and see how can we get our cost structure down and how can we get speed up and selection up. So it's is working on a lot of fronts there, but cost is certainly front and center as we meet and improve customer experience.

### **Operator**

And the next question comes from the line of Youssef Squali with Truist Securities. Please proceed.

### **Youssef Squali**

Great. Thank you very much. Andy, on logistics, in September, you launched Amazon supply chain. Can you just help us understand the opportunity you see there? Where are you in that journey to build logistics as a service on a global basis? And does that require a function increase in CapEx? Thank you.

### **Andy Jassy**

Yeah. Thanks for the question, Youssef. I think that it's interesting what's happening with our -- the business we're building in third-party logistics. And it really kind of, in some ways, mirrors some of the other businesses we've gotten involved in AWS being an example of it, even though it's -- they're very different businesses in that we realized that we had our own internal need to build a bunch of these capabilities. And we figured that there were probably others who had those same needs and we decided to build services out of them.

So, as our business has grown, it turns out to be pretty hard work to actually import items from overseas, get them through customs and through the border and then ship them from that point to various facilities. And then it turns out that you don't want to store those facilities in fulfillment centers because that space is really scarce. So you'd like to have them in upstream storage facilities that are very inexpensive. And then you'd like to have a way to be able to know when your more scarce supply in the fulfillment centers needs replenishment and be able to do it automatically from those upstream storage facilities. And so, all of those were capabilities that

we had to build for ourselves to be to operate our stores business in the way that we wanted to and that our sellers wanted to.

And so we built that capability for ourselves first and then we opened up those services as individual services to our sellers. And so, we help sellers, we have a service that allows them to get items through the border and through customs. We have a service that allows them to ship from customs to various facilities, whether they're our own or they're separate ones. We allow them to store items in our upstream low-cost warehouses that they can either automatically replenish into our fulfillment centers where we ship or they can move to other facilities that they have.

We have a service that lets them -- where we'll ship either to our end customers if they're selling on Amazon or to their end customers. We obviously have Buy with Prime, where we enable our prime customers to be able to buy from our third-party Buy with Prime sellers websites, which increases their conversion 25% versus what they would do on their own, and it's a great benefit for our Prime customers.

And then I would say that supply chain with Amazon is really an abstraction on top of those individual building block services I just mentioned that makes it easier for customers to have the whole end-to-end supply chain integrated. That collective set of businesses is growing very significantly. It's already what I would consider a reasonable sized business. And I think it's just really early days. It is not something that we anticipate being a giant capital expense driver for us. We have to build a lot of those capabilities anyway to handle our stores business, and we think we can -- it will be a modest increase on top of that to accommodate third-party sellers, but our third-party sellers find high value in us being able to manage those components for them versus having to do it themselves and they save money in the process.

## **Operator**

And our next question comes from the line of Justin Post with Bank of America. Please proceed with your question.

## **Justin Post**

Great. I thought I'd ask a couple of growth drivers that you mentioned. First, grocery, it seems like you're still changing the threshold for free delivery or the subscription prices. Just can you say at all how much that's contributing to your gross right now and do you think you're over the hump? Or are you optimistic this can be a really big category for you? And then maybe a little bit extra on Prime Video ramp, how that ramp went versus your expectations? And do you think that could be a meaningful contributor to ad revenues going forward? Thank you.

## **Andy Jassy**

Yes. I'll take them in opposite order just on Prime Video ads. Very early days, just launched a few months ago. It's off to a really good start. I think advertisers are excited about being able to expand their ability to advertise with us in video beyond Twitch and Freevee to Prime video

shows, movies, I think they also find that the relevancy and the measurability of that type of advertising and Prime Video ads is unique for them. So it's off to a very good start. It's early days, but we're optimistic there.

On grocery, I would tell you that we continue to be optimistic about what we're doing in grocery. We have a very large grocery business. It's kind of got a few different components. And we have a very, very significant non-perishables grocery business much the same way that the mass merchandisers entered this business 30 or 40 years ago. These are consumables and canned goods and pet food and healthcare and beauty products. That continues to grow at a very rapid rate. And we have an organic grocery business in Whole Foods Market, which is the pioneer in that space. And that business continues to grow very nicely. We're introducing a new smaller format in the fall in Manhattan and the Whole Foods Market daily shop idea.

We've worked very hard on the profitability trajectory over the last 18 months and like the way that, that has taken shape. And then if you want to have -- do you want to serve as many grocery missions as we aim to serve. You have to have a perishables business and a mass physical presence. And that's what we've been working on with Amazon Fresh.

We've launched our V2 format in physical stores over the last few months, primarily in Chicago and Southern California. We like the early results a lot. They're really meaningfully better in almost every dimension. It's still early, and there's some things to work through, but we like what we're seeing there. And then we have to decide the best way to roll those out over time.

As you mentioned, Justin, we just launched a Prime benefit for grocery, which is you can eat delivery for \$9.99 a month, which if you order once from Whole Foods a month, it pays for itself or once from Amazon Fresh for orders under \$40, it pays for itself. It's a very valuable offering for our Prime members, and it's off to a great start. So, we have a lot -- in my opinion, we have lots of ways that we can continue to help customers satisfy their grocery needs. And we have some building blocks that I think might also change how people split up their grocery orders over time, but I continue to be optimistic that, that's going to continue to grow for us.

## **Operator**

And our final question will come from the line of Ron Josey with Citi. Please proceed with your question.

## **Ron Josey**

Great. Thanks for taking the question. Maybe, Andy, I wanted to ask on international profitability, just after 1Q's 2.8% margin. Talk just about where we are in terms of international getting or to consistent profitability. We're following a similar trajectory as North America in terms of benefiting from regionalization shift, and we saw what average distance of each package traveled actually came down by 25 kilometers and whatnot. And if you could provide any insights on maybe how in-bound fulfillment architecture might add to just continued benefits on faster shipping, same-day, next day, et cetera? Thank you, Andy.



## **Brian Olsavsky**

Hey, Ron, I'm going to start with this one on international profitability. So yes, in the quarter, our operating income was \$902 million. And if you've watched that, we've seen a steady progression in operating income in our international segment, it's up \$2.2 billion year-over-year. So we like the trend there.

It breaks down into a few areas. I would say the established countries of Europe, Japan, as well as the UK are following a lot of the same trajectory as in the United States. They are profitable in their own right. They are adding selection, they're adding new features like grocery there, adding to their Prime benefits, and a lot of the work that we do in the United States carries over there.

The second group is the emerging countries. And, of course, we've launched 10 new countries in the last seven years. Each of those has its own particular trajectory on profitability. The first thing we see there is having a good customer experience, having people sign up for Prime. A lot of times, our Prime Video benefits help with that. Then work on our cost structure as we get scale, ad advertising and other things. And eventually, what we see is a breakeven countries breakeven and then they make positive income and free cash flow and are more of a contribution to the – positive contribution to the international segment. So we're seeing both the emerging and the established improving, and we like the trajectory. And I think you'll see more of as we move forward.

## **Andy Jassy**

Yeah. I would add a few things. I mean, I'm again quite bullish on our international stores business. It's already a very large business. We've added a number of countries that are on the right trajectory, as Brian just indicated, and it's going to be a big, profitable business for us. And I really like the direction it's headed.

I'll take also just the second part of your question just really around continuing to take -- to work on cost structure. I'd say first of all, on the regionalization side, which we've talked a lot about the last year, it may sound a little boring to talk about because we talked about it a lot of times.

But I'd just tell you that we're not done there. A lot of the work that we've done, we still have opportunities to refine to get more value out of that. And a lot of what we learned on the regionalization side in the US was in part inspired from what we saw in Europe, which, in many ways, is set up as a regional network because of the nature of how close those countries are to one another.

And I would say, we have also learned lessons from what we've done in the US that we're going to be able to apply to our international operations as well. I think we see additional opportunities in all sorts of places. A good example, of which is just how and where we inbound items to. The architecture we've had set up has largely had people inbound to a couple of places. And then we took -- we spent a lot of effort and time and expense in breaking those down and shipping them to lots of other places.

And we believe we're going to be much more efficient in how we use the inbound network and how we partner with our sellers. Part of what we did with our change in seller fees, we lowered the outbound fees in a meaningful way, but then we added an incentive for our sellers to inbound into locations that allow us to be more cost following and allow both our sellers and us to enjoy in those cost savings when we're able to do so. And we're seeing very optimistic signs there, too. I think we're still early with respect to how we can continue to optimize the number of units per box, which has all sorts of good benefits.

And then I'd just also say that it's been really interesting to watch the same-day facilities evolution in our fulfillment network. And I think a lot of people have made the assumption over the last few years that faster speeds are going to mean higher cost, and that is not the case if you build the infrastructure with the right building blocks the way we have over the last couple of years.

And our same-day facilities are our least expensive facilities in the network. We still have a fraction of the number of those that we will have in the U.S. that we'll have in other parts of the world, which will, again, both change our cost structure while increasing speed.

So, I don't think we're at the limits of what we can do. It's not going to all happen in one year. We're going to be working hard at this and inventing at this for several years, but I think we have a lot of upside in front of us.

**Dave Fildes**

Thank you for joining us on the call today and for your questions. A replay will be available on our Investor Relations website for at least three months. We appreciate your interest in Amazon and look forward to speaking with you again next quarter.

**Operator**

And ladies and gentlemen, that does conclude today's teleconference. You may disconnect your lines at this time. Thank you for your participation.