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PRESENTATION

Operator

Good afternoon, and welcome to the fiscal year 2024 Fourth Quarter and Year-end Financial Results Conference Call for Dell Technologies Inc. I'd like to inform all participants, this call is being recorded at the request of Dell Technologies. This broadcast is the copyrighted property of Dell Technologies Inc. Any rebroadcast of this information in whole or part without the prior written permission of Dell Technologies is prohibited.

Following prepared remarks, we will conduct a question-and-answer session. (Operator Instructions) I'd like to turn the call over to Rob Williams, Head of Investor Relations. Mr. Williams, you may begin.

Robert L. Williams - Dell Technologies Inc. - SVP of IR

Thanks, everyone, for joining us. With me today are Jeff Clarke, Yvonne McGill and Tyler Johnson. Our earnings materials are available on our IR website, and I encourage you to review these materials and the presentation, which includes additional content to complement our discussion this afternoon. Guidance will be covered on today's call.

During this call, unless otherwise indicated, all references to financial measures refer to non-GAAP financial measures, including non-GAAP gross margin, operating expenses, operating income, net income, diluted earnings per share and adjusted free cash flow. The reconciliation of these measures to their most directly comparable GAAP measures can be found in our web deck and our press release. Growth percentages refer to year-over-year change, unless otherwise specified.
Statements made during this call that relate to future results and events are forward-looking statements based on current expectations. Actual results and events could differ materially from those projected due to a number of risks and uncertainties, which are discussed in our web deck and SEC filings. We assume no obligation to update our forward-looking statements.

Now I'll turn it over to Jeff.

Jeffrey W. Clarke - Dell Technologies Inc. - COO & Vice Chairman

Thanks, Rob, and thanks, everyone, for joining us. As I reflect back on this past year, it's increasingly clear that data and technology are essential to everything our customers do, and Dell is well positioned to thrive in this environment. Our FY '24 revenue was $88.4 billion, with operating income of $7.7 billion and EPS of $7.13.

In a year where revenue declined, we maintained our focus on operational excellence, delivering solid earnings per share and outstanding cash flow. FY '24 was one of those years that didn't go as planned. But I really like how we navigated it. We showed our grit and determination by quickly adapting to a dynamic market, focusing on what we can control and extending our model into the high-growth AI opportunity.

Our operating margin rate improved as we delivered higher gross margins with disciplined operating expense management. We focused on cash and working capital improvements, generating $8.7 billion of cash flow from operations. And we improved our cash conversion cycle to negative 47 days exiting the year, a 15-day improvement.

We delivered on our capital allocation commitments, and we have returned $7 billion to shareholders since the initiation of our dividend. Earlier today, we announced an increase to our dividend, which Yvonne will cover in more detail.

We have positioned ourselves well in AI. We've already started to benefit from the momentum we're seeing. We saw strong demand continue for our AI-optimized server portfolio, including our flagship PowerEdge XE9680, which remains the fastest-ramping solution in company history.

We have just started to touch the AI opportunities ahead of us, including broader adoption of AI by enterprise customers, and the projected growth in unstructured data, where we are well positioned with industry-leading storage solutions. We believe the long-term AI action is on-prem, where customers can keep their data and intellectual property safe and secure.

PCs will become even more essential as most day-to-day work with AI will be done on the PC. We remain excited about the long-term opportunity in our CSG business. Look for us to make a number of new product and solution announcements at Dell Technologies World in May, that will help customers get started with AI and make it easy.

Turning to Q4. We saw positive signs in the business as we exited the year, but enterprise and large customers remain cautious with their spend. Our Q4 execution was solid given the environment, with ISG faring better than CSG. We delivered revenue of $22.3 billion with strong profitability and cash flow. Operating income was $2.1 billion, diluted EPS was $2.20 and cash flow from operations was $1.5 billion.

In ISG, traditional server demand grew year-over-year and a third consecutive quarter of sequential growth, and storage demand grew above normal seasonality, though down year-over-year as expected. Storage recovery typically lags servers by a couple of quarters. Our strong momentum in the AI build-out continues as we believe Dell is uniquely positioned with our broad portfolio to help customers build GenAI solutions that meet their performance, cost and requirements.

In Q4, we saw strength across a wider range of customers and geographies with an expanding pipeline. AI optimized server orders increased by nearly 40% sequentially. We shipped $800 million of AI-optimized servers, and our backlog nearly doubled sequentially, exiting the fiscal year at $2.9 billion.
Demand continues to outpace GPU supply, though we are seeing H100 lead times improving. We are also seeing strong interest in orders for AI-optimized servers equipped with the next generation of AI GPUs, including the H200 and the MI300X. Most customers are still in the early stages of their AI journey, and they are very interested in what we are doing at Dell.

We are helping them get started and work through their use cases, data preparation, training and infrastructure requirements. They appreciate our perspective, our collaborative approach and the capabilities we can provide to help them create holistic AI solutions, including our end-to-end portfolio, engagement with our engineering teams, consulting services and financing options. Progress in this space won’t always be linear, but we are excited about the opportunity ahead.

In CSG, we remain optimistic about the coming PC refresh cycle as the PC installed base continues to age, Windows 10 reaches end-of-life later next year and the industry makes advances in AI-enabled architectures and software applications. In Q4, we maintained pricing discipline and managed our costs well in an increasingly competitive environment, delivering solid operating margins.

In the near term, the PC market is still soft, and we expect the recovery to push into the second half as enterprise and large customers remain cautious with their spend. We will continue to execute our CSG strategy, which has served us well across various economic cycles, focusing on commercial and high-end consumer with a strong attach motion.

As we enter FY ’25, our strategy remains simple. We are leveraging our strengths to extend our leadership positions and turning new opportunities into incremental growth. We are well positioned with our unique operating model and a number of tailwinds. We are driving a disproportionate level of AI server growth, fueled by our technology leadership, engineering expertise, service capabilities, and our traditional server business is gaining momentum.

Our storage business will benefit from the exponential growth expected in unstructured data, and we are bullish on the coming PC refresh cycle where we are well positioned. We are optimistic about FY ’25 and expect a return to growth above our long-term framework.

Now over to Yvonne for more details about Q4.

Yvonne McGill - Dell Technologies Inc. - CFO

Thanks, Jeff. In Q4, we delivered revenue of $22.3 billion, down 11%, with strong gross margins and lower operating expense. Gross margin was $5.5 billion and 24.5% of revenue, up 70 basis points, with a mix shift to ISG. We saw increased pricing pressure in Q4 in PCs and servers, but remained focused on profitable opportunities, and we will continue to maintain that discipline and focus going forward.

Operating expense was almost $0.5 billion lower than this time last year at $3.3 billion or 14.9% of revenue, down 12% as we actively managed our overall spend. Operating income was 9.6% of revenue and $2.1 billion, down 1%, with lower operating expense and an increase in our gross margin rate largely offsetting the revenue decline. Q4 net income was $1.6 billion, up 22%, driven by a lower tax rate and lower l/eO. Diluted EPS was $2.20, up 22%.

ISG revenue was $9.3 billion, down 6% and up 10% sequentially. Servers and networking revenue was $4.9 billion, down 2% year-over-year and up 4% sequentially. Server order growth was strong, with the majority of our AI-optimized server orders going into backlog. Our AI mix of server demand increased again sequentially given strong customer interest in GenAI.

We delivered storage revenue of $4.5 billion, down 10% year-over-year and up 16% sequentially, with better profitability as we increased our mix of proprietary storage software. Demand improved sequentially across the storage portfolio, above our normal seasonality. ISG operating income was 15.3% of revenue and $1.4 billion, down 7%, driven by a decline in revenue and a lower gross margin rate given the higher AI-optimized server mix, partially offset by lower operating expense.
Our Q4 CSG revenue was $11.7 billion, down 12%, largely driven by a decline in units. Commercial and Consumer revenue were $9.6 billion and $2.2 billion, respectively. CSG operating income was $0.7 billion or 6.2% of revenue. Op inc was up 8%, driven by lower operating expense and higher gross margin rates, partially offset by a decline in revenue.

Earlier this week, we announced that Dell will have the broadest portfolio of commercial AI PCs in the industry and new XPS systems, which feature built-in AI acceleration with an addition of the neural processing unit, or NPU, helping to improve performance, productivity and collaboration. While PC demand recovery has pushed out, we remain bullish on the coming PC refresh cycle and the longer-term impact of AI on the PC market.

Our Dell Financial Services originations were $8.4 billion for the year and $2.5 billion in Q4, down 19%, driven by the sale of our consumer revolving portfolio and lower VMware resale. DFS-managed assets ended the year at $14.4 billion, while the overall DFS portfolio quality remains strong with credit losses near historically low levels.

Turning to cash flow and balance sheet. Our Q4 cash flow from operations was $1.5 billion, primarily driven by profitability. We ended the quarter with $9 billion in cash and investments, down $0.9 billion sequentially, driven by capital returns of $1.1 billion, and debt paydown, partially offset by free cash flow generation. And we reached our core leverage target of 1.5x exiting the year.

During the quarter, we repurchased 11.2 million shares of stock at an average price of $74.67 and paid a $0.37 per share quarterly dividend. And earlier today, we announced a 20% increase in our annual dividend to $1.78 per share, well above our long-term financial framework and a testament to our confidence in the business and our ability to generate strong cash flow.

Turning to guidance. There are several trends that give us confidence in our view of FY '25. First, the momentum around AI; second, the improvement we're seeing in traditional servers; and third, the aging PC installed base that is due for a refresh. The macro environment, however, is leading customers to be more thoughtful about their infrastructure budgets, particularly in the first half.

Against that backdrop, we expect Dell Technologies FY '25 revenue to be in the range of $91 billion and $95 billion, with a midpoint of $93 billion and 5% growth, above our long-term value creation framework. We expect ISG to grow in the mid-teens, fueled by AI, with a return to growth in traditional servers and storage, and our CSG business to grow in the low single digits for the year. We expect the combination of ISG and CSG to grow 8% at the midpoint, offset by a decline in other businesses.

Given the higher mix of AI-optimized servers, inflationary input costs and the current competitive environment, we do expect our gross margin rate to decline roughly 100 basis points. We'll maintain our cost discipline and expect OpEx to be roughly flat. We expect I&D of roughly $1.4 billion. Diluted non-GAAP EPS is expected to be $7.50, plus or minus $0.25, up 5% at the midpoint, assuming an annual non-GAAP tax rate of 18%.

For Q1 of fiscal '25, we expect Dell Technologies revenue to be in the range of $21 billion and $22 billion, with a midpoint of $21.5 billion, up 3%. We expect the combination of ISG and CSG to grow 5% at the midpoint, with ISG up in the mid- to high teens.

Gross margin rate will be lower sequentially given seasonally lower storage mix and a higher AI-optimized server mix. OpEx will be up slightly with typical seasonality. Q1 diluted share count should be between 723 million and 727 million shares. Diluted non-GAAP EPS is expected to be $1.15, plus or minus $0.10.

In closing, we are optimistic and expect a return to growth in FY '25 and beyond with a number of tailwinds. We have strong conviction in the growth of our TAM over the long term, and we are committed to delivering against our long-term financial framework with average annual revenue growth of 3% to 4%, diluted EPS growth of at least 8% and a net income-to-adjusted free cash flow conversion of 100% or better over time.

We are also committed to returning 80% or more of our adjusted free cash flow to shareholders over the long term. We're excited about the future and confident in our ability to create meaningful long-term value for all our key stakeholders.

Now I'll turn it back to Rob to begin Q&A.
Robert L. Williams - Dell Technologies Inc. - SVP of IR

Thanks, Yvonne. Let's get to Q&A. We ask that each participant ask 1 question to allow us to get to as many of you as possible. Let's go to the first question.

QUESTIONS AND ANSWERS

Operator

Thank you. We will take our first question from David Vogt with UBS.

David Vogt - UBS Investment Bank, Research Division - Analyst

I just wanted to go back to a comment that Jeff made in the prepared remarks about the unstructured data opportunity going forward. Just would love to kind of get a sense for how you're thinking about the storage opportunity as AI broadens out in your server portfolio. And how should we be thinking about the timing?

I know, generally speaking, storage kind of follow service by 1 to 2 quarters. But with the AI opportunity, did that change in any way? And how you're thinking about leveraging your existing portfolio to take advantage of all this data that's being created?

Jeffrey W. Clarke - Dell Technologies Inc. - COO & Vice Chairman

Sure. Thanks for the question, David. I look at it, and maybe in the simplest terms, to feed these GPUs with the data they need to train models, fine-tune models then ultimately drive them into production via inference is data, data-intensive. And we look at that sort of architecture that these things need to be fed and set an incredibly high bandwidth to make sure the GPU engines aren't idle.

And when we reflect on what's happening in the marketplace, the training, a lot of training initially has been done in text. And as we get to richer data sets and we move into enterprise, which we would think the big opportunity is, as AI tracks to where the data is created, which is on-prem or out at the edge of the network, it lends itself to a growing storage opportunity for us.

And I really like our portfolio. Think about what we've done with PowerScale. We recently launched the F710 and 210, where we've increased the write performance, we've increased the read performance, we've increased the performance around some of these high-concurrency, latency-sensitive workloads. It's aligned with what is going to be the growing need as this gets deployed inside the enterprise.

And I think the same is true around our ObjectScale product, the XF960. These are the types of assets and capabilities that our customers are going to need as they really move from training to inference out into what we call the real production world, and we like our portfolio.

You may have seen an announcement from us early in the quarter around a SuperPOD certified with Ethernet. We think that is an absolutely critical capability of bringing storage into the enterprise. Many and most enterprises are Ethernet based. That's a huge opportunity being in the marketplace with that and the new storage products that I referenced, I think, sets up quite well to be able to feed these new workloads with high-performance storage, which we tend to be the leader in.

Operator

We will take our next question from Erik Woodring with Morgan Stanley.
Erik William Richard Woodring - Morgan Stanley, Research Division - Executive Director & Equity Analyst

Jeff, I was wondering if you could expand maybe a bit on some of the qualitative characteristics around your AI-optimized server backlog, order and pipeline, meaning the mix of Tier 2 cloud customers that you've talked about in the past versus enterprises, how that looks like from a dollar or a client count perspective, if or what you are hearing from any sovereigns, linearity in the quarter? And any kind of qualitative details that you could share with us.

Jeffrey W. Clarke - Dell Technologies Inc. - COO & Vice Chairman

Sure. There's a lot to answer there. Let me start with maybe the demand. And you heard us talk about the demand up sequentially 40%, and that demand was across a rich customer set. The number of CSPs grew, the number of enterprise buyers grew.

So for us, 2 important indicators is less concentrated this quarter than the previous quarter, with more customers in both the CSP category and the enterprise category buying from us. That demand was spread across the H100, H800, the H200 and the M1300x. So We sold a broad portfolio or a broad portfolio of silicon diversity into the marketplace for our customers.

That's reflected in our backlog. And the backlog is hard to parse in the sense of a single lead time because it's now a complex backlog with multiple variants, the 4 that I mentioned, across deployments needed today, deployments needed through the balance of the quarter and/or balance of the first half and balance of the second half.

So we have delivery dates planned on new data center capabilities or new data center build-out. So we're excited about that. Probably another important characterization about the demand and how the backlog looks is the pipeline. Really, we talked about our 5-quarter pipeline last call. The 5-quarter pipeline grew this quarter as well.

So who we sold to grew. The potential of who we're going to sell to grew. The number of shipments that we had during the quarter grew, and the backlog grew. And we expect to ship more in Q1 than we shipped in Q4. I hope that was the color that you're looking for.

And maybe the last part of your question is there's certainly a lot of energy and opportunity around these emerging nation state opportunities, building out AI and rebuilding their economies around these modern technologies. We believe we're in those discussions. We believe that's a very untapped opportunity in the marketplace. And we're certainly -- with our geographic coverage and our go-to-market coverage, I believe we're in the game.

Operator

We'll take our next question from Aaron Rakers with Wells Fargo.

Aaron Christopher Rakers - Wells Fargo Securities, LLC, Research Division - MD of IT Hardware & Networking Equipment and Senior Equity Analyst

Yes. Congrats on the good results. I guess, getting away from maybe the AI because I'm sure a lot of people are focused there, but I'm curious in your comments on the traditional server market. I know some of the Gartner data suggests we're still seeing overall units down quite a bit on a year-over-year basis in servers, offset by AI. But what's giving you the confidence or the visibility that you're starting to see the traditional server market recover? And just any thoughts on the pace of that as we look through the calendar year?
Jeffrey W. Clarke - Dell Technologies Inc. - COO & Vice Chairman

Well, maybe a couple of data points, I'm sure Yvonne will add to this. I think we mentioned in our talking point, the traditional server business grew year-over-year in demand in Q4. It was the third consecutive quarter of sequential growth. We look into the pipeline of the coming year, and it continues to improve. This is the longest digestion period that I can recollect in this industry.

Everything is setting up for an investment in traditional servers to run traditional server workloads, which are very different than these accelerated AI workloads. So our line of sight into what our customers need gives us confidence that we believe that traditional servers are recovering. The question will be rate and what rate will they recover, but we're optimistic.

A long digestion period, those workload is still very important, running mission-critical workloads in many of our largest customers all the way down to small and medium businesses. The performance that we exit or the momentum that we exited the year with, I think, gives us the ability to look going forward. And our internal modeling says that our traditional server market is a modest growth on a year-over-year basis.

Yvonne, anything?

Yvonne McGill - Dell Technologies Inc. - CFO

No, no. I think you've hit it, and it's really just the moving forward into the next year and the continuation of that -- of the trend we've been seeing after the 3 quarters in a row of growth.

Operator

We will take our next question from Tony Sacconaghi with Bernstein.

A.M. Sacconaghi - Sanford C. Bernstein & Co., LLC., Research Division - Senior Analyst

I just wanted to explore the margin question a little bit. I think you talked about gross margins being down sequentially, and the first cited reason was higher AI mix. AI was less than 5 -- AI services, less than 5% of your revenues this quarter, it probably will be next quarter. So for 5% of your revenues to have an impact on gross margins that you're calling out would, it suggest that AI server margins are really low.

So can you, a, explicitly address that math where AI server margins are relative to company average gross margin? And can you talk about how you think about PC margins in fiscal Q1 and for fiscal '25?

Yvonne McGill - Dell Technologies Inc. - CFO

Thanks, Tony. Obviously, you know now we closed out FY '24 with really strong profitability. And moving into Q1, there's a number of factors that we're looking at. We've got CSG and ISG combined and expect them to grow about 5% year-over-year at the midpoint. We have total revenue at the midpoint, expected to grow and deliver at $21.5 billion or up 3%. ISG is expected to grow in the teens, driven by traditional and AI servers. CSG is expected to be down in the low single digits, so minus 3% about year-over-year. And then we get to gross margin rate, which I think is the key to your question.

So we expect that to be down quarter-on-quarter, about 200 basis points. What is supporting that expectation? We are seasonally lower in storage mix. We see that every Q4 to Q1. So that's one of the drivers. We will have higher AI-optimized server mix in Q1. Jeff already talked about that in a question.
And then holistically, we have another few influences on the margin. We've got an inflationary component cost environment. We're moving from deflationary last year to inflationary in the year that we are in right now. And then I'd say there's more competitive pressure. We're seeing more and more of that. And so that's what we expect to be impacting the gross margin.

And I'd say operating margin rates will be down quarter-over-quarter due to all the items I just mentioned. But for the year, we're expecting improved performance as the quarters progress. We're starting this way with what we're seeing now. But again, we expect this to continue to progress as the year does.

Operator

We'll now take our next question from Ananda Baruah with Loop Capital.

Ananda Prosad Baruah - Loop Capital Markets LLC, Research Division - MD

Congrats on the good results and solid execution. I guess I'll use my question just on GenAI and customer base. And was just interested, Jeff, in getting the company's view on the opportunity over time to maybe participate with the hyperscalers?

And one of the reasons that I'm thinking to ask this is that what we're hearing as we get maybe into calendar '25, B100 of volume, the hyperscalers' real desire to sort of get fully integrated, racks delivered, fully integrated rack, something that the OEMs like yourself would do well, would maybe be in your warehouse. So I just wanted to get your thoughts on that. And that's it for me.

Jeffrey W. Clarke - Dell Technologies Inc. - COO & Vice Chairman

Sure. I'll see if I can address the question. I mean the first thing you probably noticed in our web deck is we increased our view of the opportunity in the marketplace to $152 billion, 20% CAGR going forward to 2027, and quite frankly, that's probably a lagging indicator. It's still catching up. We think demand continues to be ahead of that, primarily driven as the overall desired demand for the computational components to do AI exceeds the supply picture. And quite frankly, is refreshing to see. We have a high-growth category here.

That growth is happening, certainly, in the public cloud, but increasingly more so in enterprises, which is what, certainly, given our reach and the vast capabilities that we have in business to help customers adopt AI into their business flows, I think it's a big opportunity for us. It's where the data is. 83% of all data is on-prem.

AI moves to the data. More data will be created outside of the data center going forward than inside the data center today. That's going to happen at the edge of the network, a smart factory, an oil director platform, a deep mine, all variations of this. We believe AI will ultimately get deployed next to where the data is created, driven by latency.

And we think about this, the opportunity is to get the training and fine-tuning, which is well underway now. But I mentioned earlier this notion about AI and production inferencing, running the actual tool in production to get the outcomes that businesses want. We believe that the enlarged or the untapped large opportunity, can't get my words in the right order, going forward for us. So this notion of enterprise, our enterprise customer base growing.

We sold to education customers, manufacturing customers, governments, we've sold the financial services business, engineering and consumer services companies. We're seeing vast deployments proving out the technology. In some cases, they're using the tooling of the public cloud. And then they quickly find that they want to run AI on-prem because they want to control their data. They want to secure their data. It's their IP, and they want to run domain-specific and process-specific models to get the outcomes they're looking for.

Hopefully, that gave you a rich context of what we're seeing across the customer base, the opportunity for us going forward. And this is at node scale, rack scale and data center scale.
Operator

We will take our next question from Wamsi Mohan with Bank of America.

Wamsi Mohan - BofA Securities, Research Division - MD in Americas Equity Research

You called out pricing pressure in AI servers. How are you responding to that? Do you think that you're leaving any revenue or orders on the table if the financial returns were not acceptable or are we not anywhere close to that point yet?

And if you could just clarify this acceleration in ISG growth that we're looking at in the next quarter. This quarter, server revenue growth was still relatively weak within service and networking despite a very strong $800 million in AI servers. So just hoping to think through how you're expecting the AI or non-AI server component of that in that ISG growth overall next quarter?

Jeffrey W. Clarke - Dell Technologies Inc. - COO & Vice Chairman

Maybe a couple of market descriptors and then Yvonne can weigh in on the financial impact. Look, the competitive market in PCs increased quarter-over-quarter and particularly in low price bands. So when we made remarks about us being selective or focusing on profitability, that's how to decode it in the PC business is that this -- the sub-$500 market opportunity is certainly less profitable, and we are much more guarded of how much we participated in that, which led to our share. We actually took share and midrange and high-end price bands in mature markets. So I think that's a component of this.

When I look at AI and the comments around AI and margins, our margins actually improved quarter-over-quarter with AI. That's an encouraging sign.

And there still less than traditional servers on a rate basis but improving. It's the second consecutive quarter of improvement. So that's some color about what's happening in the marketplace. We did see in traditional servers that, in large bids, the competitiveness did increase quarter-over-quarter in Q4. We expect that to continue. That's not uncommon. Yvonne?

Yvonne McGill - Dell Technologies Inc. - CFO

I would as we look at the holistic server portfolio for Q1, we're seeing, obviously, strong growth, driven by the AI servers. But we're seeing growth, as we've talked about, sequential growth over traditional servers. Yes, it's close.

We're seeing expecting growth to return year-over-year in traditional servers, but it's a very competitive market, as Jeff mentioned. And what I'm really excited about is the other thing that Jeff talked about on really getting more and more value out of our GPU servers really with as we move more and more into enterprise and get more richly configured, more services, et cetera, attached to that.

Jeffrey W. Clarke - Dell Technologies Inc. - COO & Vice Chairman

Plus the path of storage, deployment services, pro support, our consulting services, networking, selling the entire basket of the solution.

Yvonne McGill - Dell Technologies Inc. - CFO

But it is a competitive environment out there. So we'll continue to maximize our opportunities.
Robert L. Williams - Dell Technologies Inc. - SVP of IR

Yes. So modest growth in traditional, stronger growth in AI-enabled servers and an opportunity with storage, It's the year for growth.

Operator

And we'll now take our next question from Samik Chatterjee with JPMorgan.

Samik Chatterjee - JPMorgan Chase & Co, Research Division - Analyst

Yvonne and Jeff, thanks for the comments. Yvonne, maybe this is more for you. Just how should we think about higher memory costs playing through the gross margins, particularly in the fourth quarter itself that you reported. And then as we think through fiscal '25, are the headwinds more in the sort of early quarters and how much of that is sort of baked in, in relation to a headwind for the fiscal '25 guide that you gave for 100 basis points moderation in gross margin?

Yvonne McGill - Dell Technologies Inc. - CFO

Thanks, Samik. We have taken into account all the information that we have available and has embedded that into the guide, right? So we are expecting it to be an inflationary environment going forward, and we will price that to the best of our ability in the market. Obviously, it's a competitive market. So the guide embeds those expectations. And I don't know if Jeff, if there's anything else you would add to that holistically.

Jeffrey W. Clarke - Dell Technologies Inc. - COO & Vice Chairman

What we know, we have planned that into the guidance that we provided both for the quarter and the year.

Yvonne McGill - Dell Technologies Inc. - CFO

And how we're pricing deals. We have visibility to it, and we're doing what we need to do to maximize our profitability.

Operator

And we will now take our next question from Amit Daryanani with Evercore.

Amit Jawaharlaz Daryanani - Evercore ISI Institutional Equities, Research Division - Senior MD & Fundamental Research Analyst

Congrats on a nice set of numbers here. I'll speak to the AI team because that seems to what matters right now. And so Jeff, as you think about sort of the AI backlog of $2.9 billion that you're sitting on, I guess how do you think about that converting to revenue? Sort of what's the cadence you can get that to revenues as you go forward?

And then as you folks have talked about this mid-teens growth in ISG, could you maybe parse out and tell us how much you think will be storage versus traditional servers versus what is going to be driven by the AI service for the full fiscal '25.

Jeffrey W. Clarke - Dell Technologies Inc. - COO & Vice Chairman

Well, Amit, there's no easy answer to your question because the backlog is a mixed array, as I mentioned earlier, of H100s, H200s, H800s as well as MI300Xs with varying supply commitments and varying delivery commitments as well as converting new demand of this 5-quarter pipeline that
I just mentioned. We believe we will ship more in Q1 than we shipped in Q4. And as we look forward in our annual guidance, Yvonne has our best estimate of our demand and fulfillment of that demand that we've put into the annual guidance.

To be able to parse it down in more detail, we have a product transition that was in front of us that we have to work on, H100, H200, to be specific, and we're taking orders on the new stuff as well as converting current pipeline on the current product, the XE9680 with H100 and Edge as well. So that's what we're working through. You might have seen our lead times have improved, that's reflective of the H100. And our lead times on the other parts are certainly longer. And that's where we're working our way through when supply, commitments and as the demand comes in. I hope that was helpful.

Yvonne McGill - Dell Technologies Inc. - CFO

Yes. I may add from a traditional server standpoint, we're expecting modest growth. So growth in the upcoming year. AI servers, certainly a very strong growth, especially from a year-over-year standpoint. And then storage will lag a bit, but we expect tailwinds as the year progresses in the storage portfolio.

Operator

We will now take our next question from Krish Sankar with TD Cowen.

Stephen Michael Scala - TD Cowen, Research Division - MD & Senior Research Analyst

This is Steven calling on behalf of Krish. Jeff, if I could, I wanted to double click a little bit on the storage business. During the January quarter, just given the better than seasonal strength there, can you talk about whether that was driven by sort of the early wave of follow-on AI storage demand following several quarters of AI server demand? Or is that coming from traditional storage demand?

And secondly, sort of looking here in the near term, I guess when we look at your PowerStore and PowerScale products, which part of the portfolio are your AI-focused customers spending more of their CapEx dollars on? And any thoughts on for every dollar AI server being spent, is it like $0.50 or $0.75 or another $1 of incremental AI storage spending for down the line?

Jeffrey W. Clarke - Dell Technologies Inc. - COO & Vice Chairman

Sure. A lot of it, see if I can unpack that question into a few answers. So if we look at the demand that we referred to, which was beyond normal seasonality, we had year-over-year demand growth in the unstructured space, ECS as well as PowerScale. They grew quarter-over-quarter and year-over-year on a demand basis. Those are generally good indicators, as I mentioned earlier, around AI, file and object, which is the data classes that generally feed the AI engines.

So when I think about AI and the new new products that I mentioned earlier with better read and write performance, better coherency performance in these complex workloads, better density, the 710, F710 to be specific, and F210 on PowerScale and the ObjectScale XF960, those are the types of products that go into these AI workloads.

Our progress in traditional storage was good, too. We were ahead of our normal seasonality, what we had expected from Q3 to Q4, across our traditional storage business. Although we commented this in our talking points, it was down year-over-year, but better than we expected across mid-range, across our data protection products and our high-end storage products.

And then if I think long term, going forward, as we look at the opportunity, and again, we referenced the $152 billion in our web deck, we've done some analysis that's available out in the public domain, but we're looking at an opportunity where every dollar that is for an AI server, GPU server, there's $2 to growing $3 of professional services around that, networking around that, storage around that. I won't parse it down specifically.
But what’s really important is there’s a drag that the opportunity in the marketplace continues to grow, not only around the computational asset itself, with the network fabric that it’s needed, the storage subsystem to feed it, and then ultimately, the professional services to help customers deploy it, but more importantly, figure out where their data is, how to prepare the data.

And then ultimately, one of our additional value propositions across that whole spectrum is the financing arm or the ability to provide the infrastructure of all types, the ability to provide services around that and then the financing around it, we believe, is very much part of our differentiation in the marketplace, particularly as this scales to the enterprise.

**Operator**

And your next question comes from the line of Steven Fox with Fox Advisors.

**Steven Bryant Fox - Fox Advisors LLC - Founder & CEO**

I guess, Jeff, just to follow up on that. I understand the traditional lag between storage and servers. But it seems like based on everything you said, there’s a chance that storage continues to have a little bit more momentum near term relative to servers. I guess what am I missing in that, I guess, between going from inference to production type of workloads and seeing some of that extra $2 to $3? Like why wouldn’t we expect better server growth, rather better storage growth quicker this year, this fiscal year?

**Jeffrey W. Clarke - Dell Technologies Inc. - COO & Vice Chairman**

Well, we believe we reflected that in our guidance for the year in ISG. The opportunities as the richer data sets that are beyond text. Text today isn't very data-intensive and can be compressed quite efficiently. As we go to a richer data structure and data sets, this unstructured data opportunity exists as we move towards inference and in production. So that’s the opportunity.

To be able to call the rate of which enterprise will deploy AI at scale, it’s all upside from my point of view. We are literally in the early innings of enterprises deploying and moving from proof of concept and understanding this helps them drive a massive productivity inside their enterprise and to allow them to really disrupt how they bring their products and service to the marketplace and how they serve their customers.

Just like we are internally, many customers are going through understanding that and building their agendas. And this is a multiyear cycle. We believe that's the opportunity here. We’ve said publicly the productivity benefit alone is a once-in-a-generation or once in a several-generation productivity uplift. And then the ability to think about how you build products and build your services to serve your customers, there’s tremendous capability here that we believe enterprises are in their early characterization and understanding, and it's a long deployment cycle that we believe we'll benefit from and that we’re leading the industry in.

**Operator**

We will take our next question from Asiya Merchant with Citigroup.

**Asiya Merchant - Citigroup Inc., Research Division - VP & Analyst**

Great results, by the way. Just a quick question. I know you guys refreshed sort of your AI TAM as part of this presentation. The questions that I get from investors, as you think about the $150 billion TAM that you guys are highlighting now in 27, given Dell's share in storage, obviously, your mainstream server share and overall share of TAM in servers, how do you guys think about your share in this $152 billion market by ’27? Should we assume the share that you guys have now for servers and storage translates itself into the $150 billion share TAM global end?
Jeffrey W. Clarke - Dell Technologies Inc. - COO & Vice Chairman

Well, that's an interesting question. The inside baseball view here is we are leading the market, and we continue to expect to lead the market with our broad capabilities going forward. I believe it's reasonable at how we think about this internally, that we have our targets set on having a larger percentage of this market than we do in our traditional marketplaces. That's inclusive of the PC.

I think one of the things, again, I think it makes us special and different here, we can reach a large set of customers from the smallest businesses in the world to the largest multinationals in the world. We can service the CSPs. We can bring them the hardware, the GPU servers, in the future, our AIPC, so all of the way out to the edge. We have a broad range of network fabric. We have the storage portfolio that's unmatched in the industry.

Our 30-plus thousand service organizations with the consultant and professional services, organization that we have servicing in 180 different countries allows us incredible breadth to reach customers, to deploy this gear wherever they might have it. The partners that we have with our GSIs and our go-to-market allow us further reach.

So we kind of think of it that way that this is a market that's developing really aligned with the strengths of our company and allows us to extend our model in a very differentiated way, to access this marketplace in a differential manner.

Not to mention, I won't be shocked I said this, and I think our engineering capabilities here are pretty unmatched. And this stuff is really hard to tune these models, to build clusters, to get every ounce of performance that you're paying for is real engineering work. And we believe we have the engineering scale to help many customers do this.

Operator

We will take our next question from Simon Leopold with Raymond James.


I wanted to see if you could give us a little bit of insight from your perspective of what's going on in various verticals or geographies. So we've really been sort of tackling things sounding a little bit better on traditional and storage. But I'm just wondering if there's any nuance as to where it's coming from, from either market verticals, markets, geographies? What's getting better?

Jeffrey W. Clarke - Dell Technologies Inc. - COO & Vice Chairman

Simon, was that an AI-specific question or broadly across the business?


Yes. Broadly across the business, really trying to get a sense of what's influencing the business most, apart from this focus on AI?

Jeffrey W. Clarke - Dell Technologies Inc. - COO & Vice Chairman

Sure. I'll try to clear with that. Yvonne will help me along the journey here. What we talked about PCs is clearly a cycle where there's caution. You've seen that reflected in our performance and our upcoming guidance. So PC isn't an area where we're seeing the upside yet. Do I expect the PC market to be bigger in calendar '24 than '23? Yes. Do I think the PC market is likely bigger in the second half of '24 than it is in the first half? Absolutely so.
Hence, our remarks that we believe the opportunity in PCs is second half-driven. That is primarily a result of an aging installed base. It's never been bigger and older than it is today. We have a version of Windows that's retiring. And we have hardware-enabled AI PCs with an application base coming that should make it an exciting opportunity to own an AI PC. So that's sort of how that one plays out.

We talked about traditional servers. There's momentum there, 3 consecutive quarters of sequential growth in demand, first quarter in a long time of year-over-year demand growth. We exit with good momentum. We tried to reflect that in our guidance. That is in all geographies.

Storage, better than we planned. It was good to see. That was across the unstructured products, as I mentioned, that actually grew demand year-over-year and quarter-over-quarter, and our mid-range data protection class products and our high-end products that performed better than we expected on a quarter-over-quarter basis. Yvonne reflected that in our guidance.

That uplift in Q4 comes down in Q1. That's one of the challenges we have when we talk about the storage mix is changing in Q1 over Q4. And then there's just a tremendous uplift with AI. That is clearly the opportunity. It's large, and we believe we're disproportionately participating in it. And it's an exciting category, and that's driving tremendous momentum for us.

Yvonne, would you fill what I missed?

Yvonne McGill - Dell Technologies Inc. - CFO
I think you covered it well. We're expecting, really, growth across the portfolio and across the globe as the year progresses.

Robert L. Williams - Dell Technologies Inc. - SVP of IR
Yes. And then clearly, Simon, from a vertical standpoint, a small business, medium business starting to come back. Public has been strong this year. Federal has been strong. And the education business has been strong. What we're really waiting on is that large corporate, global multinational enterprise business.

And it's natural, I think, for them to be a little bit cautious given the macro, economic, geopolitical and interest rate environment that we found us in over the course of the last several quarters. So that's the verticals that we're really looking forward to come back later this year. And as you know, that's kind of a sweet spot for Dell from a customer standpoint. So I appreciate your questions.

Operator
And we'll take our next question from Ben Reitzes with Melius Research.

Benjamin Alexander Reitzes - Melius Research LLC - MD & Head of Technology Research
Jeff and Yvonne, how confident are you that you're going to get enough GPUs to grow from about a $1 billion level in AI servers in the first quarter? And then, Jeff, if you don't mind, can you just give us some more color on what you're excited about? I mean do you feel like the H200 is a multi-quarter cycle? The B100, do you feel like you're going to get them and be able to drive that into 2025? And any color on AMD and your early momentum there would be appreciated.

Jeffrey W. Clarke - Dell Technologies Inc. - COO & Vice Chairman
Ben, let me try to work my way through. Look, it's our job in the Dell supply chain to get the supply that is aligned with our demand. I think the others have commented. I'll make our comment. The demand for these things is in excess of the supply. That continues certainly into next year.
We're doing everything we can to get us much of that as we need for our customers. The methodology and allocation hasn't materially changed. We understand that. We're working that, and we'll continue to do so.

I like what we've been able to accomplish thus far. I like our view with what I know at this moment in time for calendar '24, fiscal '25. I'd also tell you, it's a little more complex this year. Last year is basically the H100 show. This year, I think I rattled off 4 different variants, and there's a transition associated with that.

Some customers will more rapidly move to that than others. We have to manage through that, and it's reflected in our pipeline and our pipeline conversion, and ultimately, our backlog and what we call inside the company are our delivery date schedules of what commitments we've made to different customers. We understand that. We know when we need the parts, we work through that. This easily continues next year.

Obviously, any line of sight to changes that we're excited about what's happening with the H200 and its performance improvement. We're excited about what happens at the B100 and the B200, and we think that's where there's actually another opportunity to distinguish engineering confidence. Our characterization in the thermal side, you really don't need direct liquid cooling to get to the energy density of 1,000 watts per GPU.

That happens next year with the B200. The opportunity for us really to showcase our engineering and how fast we can move and the work that we've done as an industry leader to bring our expertise to make liquid cooling perform at scale, whether that's things in fluid chemistry and performance, our interconnect work, the telemetry we are doing, the power management work we're doing, it really allows us to be prepared to bring that to the marketplace at scale to take advantage of this incredible computational capacity or intensity or capability that will exist in the marketplace.

What I'm excited about is this continues to rapidly move to the enterprise. This continues to rapidly move to businesses, really using it to drive business outcomes. Again, that's what we're in business to do. Our large portfolio, broad portfolio allows, we believe, for us to do that in a very differentiated manner at scale. That's the opportunity.

Someone is kicking in at the desk. I need to mention we got a storage opportunity in there, that we have a networking opportunity in there, and we have a services opportunity in there and to go for the last of the bunch of financing opportunities. So those, how could you not be excited about that given the demand environment?

Robert L. Williams · Dell Technologies Inc. · SVP of IR

All right. Appreciate that question. We've got a very tight reporting cycle with some others in the space. And so we're going to take 1 last question, and Jeff is going to do a quick close. Appreciate everyone joining.

Operator

We'll now take our final question from Michael Ng with Goldman Sachs.

Michael Ng · Goldman Sachs Group, Inc., Research Division · Research Analyst

I just had a question on the full year guidance. Can you talk about how you're thinking about the segment margins relative to their respective long-term ranges? And any swing factors that may cause performance towards the higher end or the lower end?
Yvonne McGill - Dell Technologies Inc. - CFO

Sure. Thanks, Michael, for that. As we think through the full year guide, we are, as I talked about, thinking of not only the inflationary component cost environment, but the more competitive environment that we've been seeing. We've talked about the dilutive rate impact within ISG of our AI-optimized servers.

And so if we play that through, we're looking to have better performance holistically at a company level, but I think it will be different by quarter. And especially with the mix we're seeing from an AI standpoint, Jeff just talked about all of the variants that are at play. And so expecting improvement as the year progresses from a margin standpoint, but it will be quite dynamic with the component cost environment and the competitive environment.

Jeffrey W. Clarke - Dell Technologies Inc. - COO & Vice Chairman

So with that, let me wrap up the call. We clearly have AI momentum. Whether engineering, services and financing expertise, we are well positioned to continue to grow. And more broadly, we expect to return to growth across ISG and CSG for the year, led by ISG growing in the mid-teens. We're pretty excited about that. With that comes solid cash generation that you would expect us to return to our shareholders. Thank you for joining us today.

Operator

This concludes today's conference call. We appreciate your participation. You may disconnect at this time.