

TRANSCRIPT

DELL - Q2 2024 Dell Technologies Inc Earnings Call

EVENT DATE/TIME: AUGUST 31, 2023 / 8:30PM GMT

CORPORATE PARTICIPANTS

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

Robert L. Williams *Dell Technologies Inc. - SVP of Investor Relations*

Tyler W. Johnson *Dell Technologies Inc. - Senior VP & Treasurer*

Yvonne McGill *Dell Technologies Inc. - CFO*

CONFERENCE CALL PARTICIPANTS

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

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

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

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

David Vogt *UBS Investment Bank, Research Division - Analyst*

Erik William Richard Woodring *Morgan Stanley, Research Division - Research Associate*

Krish Sankar *TD Cowen, Research Division - MD & Senior Research Analyst*

Michael Ng *Goldman Sachs Group, Inc., Research Division - Research Analyst*

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

Shannon Siemsen Cross *Crédit Suisse AG, Research Division - Research Analyst*

Simon Matthew Leopold *Raymond James & Associates, Inc., Research Division - Research Analyst*

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

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

PRESENTATION

Operator

Good afternoon, and welcome to the fiscal year 2024 Second Quarter 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 a 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. 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 Investor Relations*

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 our materials and 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 and diluted earnings per share. A 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.

Given where we are in the macro cycle, we will be referencing sequential growth more frequently this quarter. 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 our 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. Coming into the quarter, we were cautious given our Q1 results, but the demand environment improved at a faster rate than we anticipated, particularly as we moved into June and July. Operationally, we executed well with expense controls, pricing discipline and lower input costs. We sharpened our focus on pricing this quarter, and we were selective on deals, particularly where share benefits would have been temporary. While revenue was down year-over-year, a better demand environment and strong execution enabled extraordinary Q2 results, revenue was \$22.9 billion, with operating income of \$2 billion and diluted EPS of \$1.74, well ahead of our initial expectations.

We are encouraged with some of the signs we are seeing in the macro environment as we move into the second half. We saw better underlying demand in the U.S. market and EMEA was better than anticipated. We also saw demand growth in government and SMB and our transactional demand improved through the quarter. However, most of our largest global customers remain careful with their spending levels. From a solutions perspective, we saw significant strength in AI-enabled servers. PowerFlex and PowerStore demand grew within our storage portfolio.

PowerFlex, our proprietary software-defined storage solution has now grown 8 consecutive quarters with demand in Q2 more than doubling year-over-year. Workstation demand grew and was another bright spot that will continue to benefit from the rise of AI. Developers and data scientists can now fine-tune GenAI models locally before deploying them at scale. Commercial PC demand improved sequentially and as we move through the quarter. And S&P attach rates were strong, particularly in software. Our ASPs continue to expand across AI servers, traditional servers and commercial PCs.

Overall, we were pleased with the quarter given strong sequential growth of 10% and growing interest in orders in AI solutions. Artificial intelligence is a strong tailwind for all things data and compute as well as CSG when you think about the potential for workstations and eventually all PCs. AI is expanding the TAM for total technology spending and is projected to grow at a 19% CAGR for the next couple of years to approximately \$90 billion, including hardware and services.

In Q2 alone, we saw unprecedented strength from our PowerEdge XE9680. It's the fastest ramping new solution in Dell history and builds on the success of other GPU-enabled servers we've been selling for years. The 9680 is a key element to our Dell generative AI solutions engineered to speed the deployment of a modular, secure and scalable platform for generative AI in the enterprise.

AI servers increased to 20% of our servers order revenue in the first half of the year and the 9680 was a big factor. Currently, we have approximately \$2 billion of XE9680 orders in backlog and our sales pipeline is substantially higher. GenAI represents an inflection point driving fundamental change in the pace of innovation while improving the customer expectation and enabling significant productivity gains and new ways to work.

As the #1 infrastructure provider, we are clearly positioned to serve the market in a unique and differentiated way. And we have the world's broadest GenAI infrastructure portfolio that spans from the cloud to the client. Customers big and small are using their own data and business context to train, fine-tune and inference on Dell infrastructure solutions to incorporate advanced AI into their core business processes effectively and efficiently. We can help customers size, characterize and build the GenAI solutions that meet their performance, cost and security requirements. Many of these new workloads will be on-prem or at the edge given the importance of latency, data security and cost.

In the near term, we are seeing organizations concentrate on 4 GenAI use cases, customer operations, content creation and management, software development and sales. And internally, we are doing the same to enhance how we build products, service our customers and improve productivity and efficiency.

As we think about the back half of the year, we are coming off a Q2 where we grew above normal seasonality and demonstrated the power of our model to generate cash in a sequential growth environment. You should expect us to focus on growing and extending our core business in the areas with the most attractive profit pools, deliver innovation for our customers, remain disciplined on our pricing and focus on costs with multi-cloud edge and GenAI as tailwinds. I like our hand and look forward to talking more about our views on technology trends, strategy and innovation at our Securities Analyst Meeting in October.

Now over to Yvonne for a detailed Q2 financials.

Yvonne McGill - Dell Technologies Inc. - CFO

Thanks Jeff. We're pleased with our Q2 execution in an improving demand environment. We delivered revenue of \$22.9 billion, down 13% and up 10% on a sequential basis with strong gross margins and strong operating expense and net working capital management. Currency remained a headwind and impacted revenue growth by approximately 130 basis points.

Gross margin was \$5.5 billion and 24.1% of revenue. Our gross margin rate was up 270 basis points, driven by lower input costs and pricing discipline. We did see increased pricing pressure in Q2, but we're selective on deals depending on the customer and opportunity. As Jeff mentioned, we are focused on profitable opportunities rather than temporary share gains. And you can expect us to continue to focus on the more profitable segments of the market and maintain pricing discipline.

Operating expense was \$3.6 billion, down 4% driven by lower discretionary spend in SG&A and was flat sequentially. Operating expense was 15.5% of revenue and we will continue to actively manage our spend as we move through the second half. Operating income was \$2 billion, up 1% and 8.6% of revenue. With the impact of the decline in revenue offset by an increase in gross margin rate and lower operating expense.

Our quarterly tax rate was 20.4%. Net income was \$1.3 billion, up 1%, primarily driven by higher operating income and diluted EPS was \$1.74, up 4% due to lower share count and higher net income. Our recurring revenue in the quarter was \$5.6 billion, up 8%, and our remaining performance obligations or RPO, was \$39 billion, up 1% sequentially driven by deferred revenue. Deferred revenue was up primarily due to increases in software and hardware maintenance agreements.

ISG revenue was \$8.5 billion, down 11% and but up 11% sequentially on the back of improving server and storage demand. We delivered storage revenue of \$4.2 billion with demand growth in PowerStore and PowerFlex.

Servers and networking revenue was \$4.3 billion. We saw server ASPs continue to expand and our AI server mix of server revenue demand continued to increase given the recent rise in customer interest in generative AI solutions. Both storage and servers and networking revenue were up 11% sequentially. ISG operating income was \$1 billion or 12.4% of revenue, up 140 basis points, driven by an increase and gross margin rate, offset by a decline in revenue.

Turning to CSG. The calendar Q2 PC market was down 14% in units but is now showing signs of improvement, up 7% sequentially. Our fiscal Q2 CSG revenue was \$12.9 billion, down 16%, primarily driven by a decline in units, partially offset by higher average selling prices. Revenue grew 8% sequentially and commercial continues to fair better than consumer with commercial revenue growing sequentially to \$10.6 billion. Consumer revenue was \$2.4 billion. CSG profitability remained strong in Q2, with operating income of \$1 billion or 7.5% of revenue, up 120 basis points, driven by an increase in gross margin rate and lower operating expense as we maintained pricing discipline and benefited from lower input costs.

We remain focused on commercial and the high end of consumer, profitable relative performance and executing our direct attach motion for services, software, peripherals and financing. Customer interest remains high in financing and consumption models that provide both payment flexibility and predictability. Our Q2 Dell Financial Services originations were \$2.3 billion, up 1%.

DFS ending managed assets reached \$14.7 billion, up 9%, while the overall DFS portfolio quality remains strong and credit losses near historically low levels. During the quarter, we continued to see Apex momentum, including a strong double-digit percentage increase in a number of new Apex customers that have subscribed to our as-a-service solutions with strength in our data center utility and flex on demand offerings.

Turning to our cash flow and balance sheet. Our cash flow from operations was \$3.2 billion, primarily driven by working capital improvements, sequential growth and profitability. Within working capital, we reduced inventory \$0.4 billion sequentially and continued strong collections performance with pass due now at record low levels.

With the work we've done on net working capital post pandemic, our cash conversion cycle has now improved to negative 50 days in Q2, in line with pre-COVID levels. Cash and investments was up \$0.7 billion sequentially driven by free cash flow generation offset by \$1.1 billion of debt paydown and \$0.5 billion in capital returns. In Q2, we repurchased 5.2 million shares of stock at an average price of \$49.53 and paid a \$0.37 per share of dividend. Our core leverage improved to 1.6x exiting the quarter, and we ended Q2 with \$9.9 billion in cash and investments, which gives us flexibility to increase our return of capital going forward.

Since we implemented our current capital allocation framework 6 quarters ago, we have returned over 90% of our adjusted free cash flow in the form of share repurchase and dividends, and we continue to evaluate enhancements to our framework based on investor feedback.

Turning to guidance. We're seeing signs of stability across a number of areas within our business, including small and medium business and government. But our largest corporate and global enterprise customers are still measured in their IT project investments and spending plans. Against that backdrop, we expect Q3 revenue to be in the range of \$22.5 billion and \$23.5 billion with a midpoint of \$23 billion, flat sequentially.

Currency continues to be a headwind, and we are expecting a roughly 40 basis point impact to Q3 revenue. We expect both CSG and ISG revenues to be roughly flat sequentially. Although we remain disciplined and focused on profitable share, we expect a more competitive pricing environment.

Combined with more muted component cost deflation, we expect gross margin rate will be down 150 basis points sequentially. Our continued focus on cost controls will drive lower sequential operating expense that partially offset expected gross margin dilution. We expect our Q3 diluted share count to be between 733 million and 737 million shares and our diluted EPS to be \$1.45 plus or minus \$0.10.

For the full year, we're raising our FY '24 revenue expectations to be in the range of \$89.5 billion and \$91.5 billion, down 12% at the midpoint. Given Q3 guidance, this implies sequential growth in Q4. We expect interest and other to be roughly flat year-over-year. For our tax rate, you should assume 22.5%, plus or minus 100 basis points. We are increasing our expectations for diluted earnings per share to \$6.30, plus or minus \$0.20.

In closing, we have strong conviction in the growth of our TAM over the long term with AI, multi-cloud and edges tailwinds. We have generated \$8.1 billion of cash flow from operations over the last 12 months demonstrating our ability to drive efficiency in working capital during a more challenging demand environment. And our Q2 performance underscores the power of our model to generate cash when we return to sequential growth. We remain focused on executing our strategy, investing in innovation to expand our TAM and winning the consolidation of our core markets, including multicloud, edge, telco and AI.

Expect us to continue to be disciplined in how we manage the business, focusing on what we can control and delivering to our customers and our shareholders. And we look forward to seeing you all at our Security Analyst Meeting in October, where we'll provide updates on our strategy, long-term value creation framework and capital allocation policy.

Now I'll turn it back to Rob to begin Q&A.

QUESTIONS AND ANSWERS

Robert L. Williams - *Dell Technologies Inc. - SVP of Investor Relations*

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

Operator

We will take our first question from Shannon Cross with Credit Suisse.

Shannon Siemsen Cross - *Crédit Suisse AG, Research Division - Research Analyst*

Jeff, can you talk a bit more about -- you've talked a lot about it, but can you talk a bit more about the AI opportunity. Discuss 4 core use cases, but can you talk on a segment and a geographic basis? And how should we think about ASP potential for both servers and storage with AI-oriented solutions. I'm just wondering, is AI going to drive sort of a change in hardware spend that you think is more of a secular positive versus maybe temporary in nature?

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

Shannon, let me take a stab at that. First of all, we think AI, and I think I've said this in our last, Ask the Experts, call but I think it's worth reinforcing is, it's just a new series of workloads and new incremental capability that goes across the PC to the data center to the cloud. And we think it is absolutely because of the uniqueness of the workload, a growth opportunity in all 3 of those areas. Distinct and how it's built out, distinct and how it's going to be used on the PC, opening a whole new opportunity to drive productivity and a great productivity device as is, being able to use these big foundational models at cloud scale.

And then what we think really happens on the enterprise level in business is sort of the notion of domain-specific, process-specific or field of study type of AI, where we actually use customers' data, business will use their data, they will tune the model and then run inference at site on edge, whether that be in a smart factory, smart hospital, in a transportation network.

So when you think about the vertical nature of this and how it will actually work in the real world, we think that technology makes its way all the way out to the edge, AI follows where the data is going to be created, where the sensors are collecting the information and that allows us to put those compute resources where the data is actually being again created. That is not specific to geography. It's not specific to size of business, it's going to be really driven by the type of application and the usage environment. And I think that is what's really exciting about this.

We think it's one size does not fit all. We think there's a whole slew of AI solutions, again from the PC to workstations to what happens in the data center and the data center could be a single server running inference at the edge. It could be defined as a small cluster doing a small micro or fine level tuning all the way into these big foundational models where we do cloud scale training.

So -- in a nutshell, I guess, that's as quickly as I could describe the opportunity. We believe it is incremental. Am I going to say it doesn't come at the expense of some data center servers, of course, not. I don't think we know it's in the early innings. We do know the workloads are distinctly different. The architectures are distinctly different, and we will build different systems for AI and that massive, if you will, data processing that's done in parallel versus how we've historically built applications in the past for the data center.

Operator

We'll take our next question from David Vogt with UBS.

David Vogt - *UBS Investment Bank, Research Division - Analyst*

Can we just stick on AI for a second and maybe dig into how you're thinking about your allocation or your ability to allocate -- or get allocation to GPU capabilities, right? So obviously, it's a bit of a rush right now with some limited supply and some gating factors, and you talked about \$2 billion of servers in your order book. Can you kind of just share with us sort of how you see yourself competitively sitting into that queue? And are you seeing any sort of challenges in getting ample supply to sort of meet that order book? And how should we expect that order book to sort of filter through revenue as supply becomes available?

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

Sure, David. Maybe the easiest measure to determine where we are with supply is demand is way ahead of supply. If you order a product today, it's a 39-week lead time, which would be delivered the last week of May of next year. So we are certainly asking for more parts, working to get more parts. It's what we do. I'm not the allocator, I'm the allocatee. So we're advocating our position on our demand. Again, we are winning business signaled by the \$2 billion in backlog today with a pipeline that's significantly bigger.

I was in the discussion yesterday with 2 different customers about AI, the day before about AI. It is constantly something that's coming into our business that we're fielding the opportunities. From different cloud providers to folks building AI as a service to enterprises now beginning to do proof of concept and trying to figure out how they do exactly what I just said earlier, use their data on-premises to actually drive AI to improve their business.

We'll continue to work and advocate for more supply, and then I'll also tell you, we're tracking at least 30 different accelerator chips that are in the pipeline in development that are coming. So there are many people that see the opportunity. Some of these new technologies are fairly exciting from neomorphic type of processors and 8 types of accelerators, there's a series of new technologies and quite frankly new algorithms that we think open up the marketplace and we'll obviously be watching that and driving that across our businesses and helping customers.

Operator

We'll take our next question from Samik Chatterjee with JPMorgan.

Samik your line is open. If you could please check your mute button.

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

Congrats on the results. Just trying to square the guidance for ISG to be flat when you talked about seeing order improvement? And maybe if you can talk about what are the -- sort of what did you see in terms of linearity of orders during the quarter, both in servers and storage. I mean I understand large enterprises might be still measured, but you did mention there are sort of other segments of the market or verticals that are spending, and it does look like you're seeing more sort of macro -- green shoots of a macro improvement. So just trying to square like how much of that flat guidance sort of embeds pricing being the major driver of that sort of flattish guide versus demand? Just help me square that, please.

Yvonne McGill - *Dell Technologies Inc. - CFO*

Let me go ahead and start on that, Samik. So as we're looking into the third quarter and we're talking about the external environment. We have a lot of near-term dynamics that we're navigating through. We're confident about the go forward, but we're guiding to flat sequentially at \$23 billion. We're expecting stability we've seen in the transactional business. So I talked about small business, medium business and government. .

But in the ISG space, which you're particularly asking about, we're expecting that to be overall flat sequentially with servers a bit better, really on the -- leaning in on the GCI -- GPU mix, excuse me, but not expecting that rate of decline to improve much on the rest of the server portfolio. And then from a storage perspective, we've got a seasonality, we're normally seasonally down in the third quarter.

And so that storage -- we're expecting a lower storage performance in that quarter. Now at CSG, we also have it flat. We have some mixed dynamics in there with mixing more towards the holiday period. So we'll have that coming in. And we'll have that also with some [TRU] pressure that we're expecting from the external environment.

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

Yes. I might add it's a complement, Yvonne, just said on the ISG, specifically storage as you mentioned, it's seasonally down Q2 to Q3. And with the weakness in our enterprise customers, they happen to be the greatest concentration of the high-end or high-price band storage arrays that we sell and that puts pressure on the P&L in Q3.

Yvonne McGill - Dell Technologies Inc. - CFO

That's right. We haven't seen those larger corporate and global enterprise customers really come back into the spending zone yet.

Operator

We'll take our next question from Toni Sacconaghi with Bernstein.

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

I just have a quick clarification in the question. I think you said your server backlog in revenue terms was 20% GPU or accelerator based. I just wanted to confirm that. And as context, could you add what was the percentage of server revenues this quarter that was GPU-based and a year ago? .

And then my question is just on operating margins, you're kind of above your historical levels in CSG of 5% to 7% you're above ISG historically, maybe 11% to 12%. Is there anything structurally that's changing or was this kind of a unique quarter in terms of strong sequential growth in cost control and maybe even next quarter given the gross margin guidance, we should be back down to normal levels or is there something either about AI or about how you're picking where you want to participate, that the kinds of margins we saw this quarter in both businesses might be something we might continue to see.

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

I'll take the first half of the question, Tony. I believe my remarks were 20% of the first half orders in servers or AI-based servers, the XE family, et cetera. And if you were to compare it against a year ago since the XE family of products did not exist, and that's the vast majority of the backlog. It's a very large percentage on a year-over-year basis. I actually did calculate it, but it'd be a very big number. given most of the \$2 billion backlog I noted is XE9680 base. .

Yvonne McGill - Dell Technologies Inc. - CFO

And then I'll jump in on the profitability question. I think what we saw or what we did see in Q1 and Q2 was really, I think, a great example of our differentiated model, right, with the ability to capture that deflationary environment and translate it through the P&L quite quickly. We saw component deflation that was better than anticipated and stable TRUs and that let us really deliver that higher margin rate. In Q3, though, we're expecting a few things, right, a more competitive environment now that we're seeing inventory levels more normalized.

And we think that we'll see more of our competitors have that broader access to lower component costs. And then I'd wrap on that with saying that we're expecting a deflationary environment to continue, but less so or more muted in the third quarter than what we saw in Q2. So there -- we're very pleased with how we performed in the second quarter. In both CSG and ISG that are expecting that competitive pressure to -- and mixed dynamics, especially in the third quarter coming through in ISG as we mix less towards storage seasonally, and we'll mix back into the storage element in the fourth quarter.

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. Thanks for the question and also congrats on the results. I'm going to shift away from the AI narrative and maybe talk a little bit about the balance sheet side of the equation for Dell. I think in your prepared comments, you highlighted that you've now got, I think it was close to \$9.9 billion of cash on the balance sheet. And one of the things you also mentioned was improving flexibility or increased flexibility on capital return side. So I'm curious of how you're thinking about capital return relative to M&A? And any context of how much capacity or maybe put in other way, how much operational cash do you necessarily need as we think about the excess cash that you're carrying on the balance sheet on top of the free cash flow generation for the company.

Tyler W. Johnson - *Dell Technologies Inc. - Senior VP & Treasurer*

Yes, this is Tyler. Maybe I'll start and Yvonne might step in. But I think we've always talked about our minimum cash balances being somewhere around, call it, \$4 billion to \$5 billion. Now it doesn't necessarily mean I'm going to run at those levels. But clearly, we have excess cash. As you saw, it was a really strong cash quarter. And actually, if you look at the first half of the year at \$5 billion of CFOps that's a record, right? So great job by the teams on working capital and something we've been extremely focused on.

So it's great to see the progress that we made. So just like Yvonne mentioned during the opening remarks that does give us more flexibility. As I think about our capital return framework, nothing has changed there. So -- as we look at share repurchase, for example, we look at dilution first and then we think about opportunistic buys. And I think this just gives us more flexibility as we're working through that. We don't provide guidance on that, but obviously something that we're looking at.

Operator

We'll take our next question from Erik Woodring with Morgan Stanley.

Erik William Richard Woodring - *Morgan Stanley, Research Division - Research Associate*

Jeff, I want to maybe spend some time on storage in the quarter, revenue down just 3% year-over-year. I imagine that was better than expected. Can you maybe just walk us through what you're seeing in the storage market? Where do you think we are in this cycle? Maybe said differently, how much of the performance in 2Q was Dell specific versus the market? And if you could weave in if there is any storage pull-through from AI servers, that would be helpful as well.

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

Sure. If you -- I mean, our performance was primarily driven by our strength in HCI, most notably, our PowerFlex, which is our proprietary software-defined storage solution and its growth. We're seeing great momentum there. Its ability to independently scale compute and storage for

high-performance applications. We're seeing that technology being embraced in the marketplace. And it clearly has grown. I think I made a remark that it's grown now I think it's 8 consecutive quarters, and it grew triple digits, more than doubled in the quarter. So that certainly was a highlight of the portfolio in storage.

PowerStore, our mid-range offering now has grown 12 consecutive quarters in a row. It is the mainstay of our mid-range offer, so that continues to be a strength in the business, particularly given the largest multinational customers in the world are very guarded in their buying, being able to sell to large corporates, large midsized -- medium-sized businesses, certainly is the home of where our midrange product is.

I mentioned earlier in one of the questions that our high-end storage is going through that down cycle where we saw the mainframe refresh we saw buildup through the COVID time are now in the digestion of that capacity that was brought online. That's the backdrop of our storage business. I'm very optimistic. We're working to get tighter correlation that the AI compute side should be driving the unstructured storage side and the object storage side, our ECS business. When you think about the large amounts of data this is going through.

And I think we'll really see this as enterprises deploy AI more broadly that the unstructured data in its various forms all-in structured will be looking for highly scalable solutions, and we have the most highly scalable, high-performance unstructured systems in the market with our PowerScale and ECS object storage. So I'm optimistic. I would tell you there's not a tight correlation to the moment. Most of it is compute with software-defined storage inside that compute. I hope that helped.

Operator

We'll 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. Maybe just go back to the AI server opportunity. I was hoping you folks could talk about who are the customers that are buying this from Dell? Are they traditional enterprises? Are they hyperscale customers? And I guess Jeff, maybe just help us understand what is Dell's value proposition when it comes to GPU-enabled service? Because I think the concern might just be that what's the durability of these revenues, if they're coming from customers that typically use ODMs and they can't get GPU allocations. Can you maybe just talk about the value prop that is providing who the base is? And is this accretive or dilutive do you think then to your ISG margins?

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

Must be 4 or 5 questions in that question. So let me work my way through that. I mean, clearly, we believe today. And my words, hopefully, at the opening resonated that this is a big incremental opportunity and that these new workloads demand a new type of architecture and new type of technology. We believe we've hit the sweet spot with that with our XE9680, for example. But there are 3 other AI servers in our portfolio as well. If you think about the 9680, why is it an interesting product. I mean, clearly, we worked closely with NVIDIA over 3 years.

Tuning its performance. We believe it's the highest performance, most dense AI server you can buy today. You can give it as a [6U] product. We think about it as power efficiency, what we've been able to do around air cooling at ambient temperature of 35 degrees Celsius, what we've done with iDRAC, what we've done around the connectivity side with 10 PCIe ports for it to work on high-performance clusters.

So we've built something purposely for AI. If you think about the types of services that we announced that Dell Technology World and subsequently, a broader range of services with Helix, the ability to help enterprises deploy this, help them understand where their data is, how to get their data prepared, how to implement the infrastructure with ease and how to begin to train models, tune models and then ultimately be able to run inference at the edge or in their data center. That package of services and capabilities we're just in the beginning of.

The types of customers we're selling today is a wide range. There is a density of that today with some of the new AI as a service companies. We're seeing enterprises, as I mentioned, early buy in small volumes so they can do proof of concept, so they can begin to understand, test, do that sort of work.

But if you look at the long-term attributes of this opportunity, we think it's AI in a lot of places at the edge. at the data center and cloud. It's going to track the data. In my mind and architecturally when we look at this in every way that we've looked at it, AI is going to follow the data. It's highly unlikely you're going to have a smart factory or a smart hospital or a set of robots that are going to continuously look to be trained or run inference a long way away. Latency will matter. We think security will matter. We think performance will matter, and we ultimately think cost will matter.

And when you put that equation together, we think it's going to be a hybrid world. There will be some AI done in the cloud -- will be done, some AI done on-prem. We think it's going to be very, very heterogeneous in the way that this will be done with classic compute as well as accelerated compute. In a nutshell, that's what we think of the opportunity. I certainly could go into more detail, but I think I hit a series of questions, at least on the surface.

Operator

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

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

Your primary USB-C competitor noted a lower PC TAM in 2023, also a backdrop of a more challenging component cost environment. I was wondering maybe, Jeff, you could talk about the trends in commercial and consumer through the rest of this year and set up into next year from a PC TAM perspective and also from a margin perspective.

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

Sure. Our view of the market hasn't materially changed from our last call. I hear -- maybe that's on our end, a scratch. I'll try to talk over that.

We see the market at roughly 250 million units, which would roughly have it down 15% over last year, 2 consecutive years down, we see it slowing in the second half against easier compares. That's reflected in what Yvonne just gave us guidance for both Q3 and tied into the year. So we see PC rates have declined slowing and to the point where we head into next year, and we're optimistic that there is growth in the PC next year.

Low single digits. We can debate that number. If you told us, we'd give you, say, probably in the 3% to 4% range is what we think today the opportunity to grow next year. What's really interesting through this phase is the types of PCs we're selling tend to be at a higher ASP. If you look at our ASP against the balance of the industry, we're roughly 2x. Why is that? One, driven by commercial mix; two, the attach -- the attach of our peripherals, our software and services, it generally drives a 2x ASP to the industry. Also driven by the types of products we've build are focused to the profit pools that we build to commercial PCs.

Again, premium consumer and gaming that recipe has served as well. That's not where all the units have been in the first half of the year. There have been a lot of units, which is why, quite frankly, we've struggled with a bit of share challenge this year as many of the units have been in emerging markets, have been in a low price band consumer and Chrome, which we're not particularly strong in. We focused into the profit pools where we are very strong and a market leader. We think about next year and as we end this year with a new version of Windows with CoPilot, all of us building AI-enabled PCs. We think AI at the edge on the PC is a great, I call it the killer app. I think that killer app is going to drive a productivity increase. And any time we've seen new applications that drive productivity at the edge on the PC, we've seen the market rebound.

And if you're going to ask your PC to do more, it generally means it needs a bigger CPU, a little more memory, a little bit more storage, a better display, et cetera, et cetera, which is another proxy for driving ASPs. That was a mouthful. I think I covered it all. We're going to weather the storm

this year. The market is down. That's not going to change. It's rate of decline slows in the second half. ASPs are holding the opportunities in the profit pools, which we continue to focus on, and we're optimistic about a modest growth in calendar '24.

Robert L. Williams - *Dell Technologies Inc. - SVP of Investor Relations*

Thanks for the question, Wamsi.

Operator

We'll take our next question from Asiya Merchant with Citigroup.

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

Great. Thank you for the opportunity and great results. Jeff, in terms of PowerPoint, you guys talk about the long-term market growth opportunity. And clearly, you're very excited about how AI and some of Dell's core offerings are helping shape the market as well. So if you could just talk about when you think about your growth, your market opportunity, how we should think about that in the face of AI? Is that something that we should expect to maybe edge higher just given the growing amount of workload, the higher ASPs on the computer side as well -- and is that something that we should expect for calendar '24 to see an acceleration in growth relative to your long-term market growth forecast, especially coming off a down year in calendar '23.

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

Well, we tend to think about these growth opportunities in areas where our model really extends or expands. So if you think about our leadership position across PC storage, compute side, you think about our large go-to-market presence, you think about our, I think, scale and advantage in the supply chain are very scaled service organization. How do you take those 4 attributes and apply it to new growth opportunities? We've clearly picked and talked about them in the past as telco, which is off to a good start.

Edge, we just -- we've been engaged through partners in the marketplace, but the native Edge product that I announced on stage at DTW ships here very shortly next week. We think about the opportunity in multicloud as we build out the multicloud platforms that I talked about on stage. They get delivered later this year. They're on schedule. And then there's the fourth tailwind that we've talked about a bit already today, which is AI.

And again, to be clear, we think it is an incremental opportunity. Is it wholly 100% a new category, not cannibalizing some of the data center, I don't know. I don't think that's worth debating. I know the workloads are different. I know the architecture and the types of products that we have to build to serve that demand and need are different. I think that is pretty exciting. Our model plays quite well there.

Given the backlog and allocation of parts, we will be carrying AI backlog into next year, it's just -- we won't get enough parts to clear the backlog even the 39 lead time of today. And I think it continues to build momentum because the early adopters tend to be concentrated in this AI as a service and the hyperscalers. And we've now talked about and firmly believe it's going to be deployed on-prem and at the edge.

We've said this before. We think there's going to be AI factories everywhere, little ones and big ones and little ones on the edge and medium-sized ones in data centers and large ones at cloud scale. That paints a picture of a pretty significant opportunity for us, and we have to continue to build our portfolio of services, which I think is key with the hardware. So our hardware aligned with certification of the application, the open source community that's out there today, making sure they run great on our portfolio of XE servers and then ultimately build servers both embedded services and professional services around the platforms themselves.

Operator

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

Michael Ng - *Goldman Sachs Group, Inc., Research Division - Research Analyst*

Thank you very much for the question I just had on AI servers and ISG. It's encouraging to hear that server ASPs increased, AI server mix increased, and we saw improving gross margins in ISG. Was that primarily storage mix? Or are AI servers accretive to margins. And I'm just wondering if you could talk about whether or not there are any things to discuss as it relates to how GPUs are accounted for in AI servers? Is it done on a consignment basis? Or does it just flow through normally? And then lastly, I was just wondering if the success of XE9680 improves your revenue visibility into next year, just given the backlog and whether we should think about seasonality very differently for next year.

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

A few questions on pack there, Yvonne and I will try to make our way through that. And maybe in a logical order. When we think about this, our improvement in the P&L in Q2 was driven by the sequential growth in both storage and in servers. And because we had a favorable cost environment, we saw margin expansion in both servers and storage, which was good. You saw that in our performance. When I think about the role of AI servers, AI servers from an ASP point of view are significantly greater than a data center or a general-purpose computer, if you will. They're dilutive on a margin percentage. They are accretive on a margin dollar basis. That's how Yvonne and I look at the business.

That's the backdrop of how we look at AI servers in our portfolio, continuing to drive gross margin dollars, making sure that it's accretive from that point of view. Given that this is the early innings, we have our selling services around these. Much of the service is deferred on our balance sheet when we sell service around these. That's an opportunity to collect that when we can build more services around the deployment of these things like Project Helix that we've talked about being able to help our customers across the entire ecosystem that provides more opportunity for us to grow our part of the AI hardware and service market, which I believe I quoted in our remarks that we think it's going to grow 19% over the next handful of years to \$90 billion.

Yvonne McGill - *Dell Technologies Inc. - CFO*

And we'll strengthen our balance sheet as that grows. So looking forward to that opportunity.

Operator

We'll take our next question from Simon Leopold with James -- Raymond James.

Simon Matthew Leopold - *Raymond James & Associates, Inc., Research Division - Research Analyst*

I wanted to see if maybe you could talk about some of the dynamics related to the supply chain for your enterprise storage in that I think you've had some margin benefits from lower prices for NAND, solid-state memory. And there are, I guess, some expectations that supply and demand shift, pricing will go up for the memory next year. And I'm just wondering how to think about the effects on both your revenue and margin in storage?

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

Sure. As Yvonne mentioned in a couple of her remarks as well as to the questions thus far, we had a deflationary cost environment in Q2. Our view is that we'll be deflationary in the second half, although the rate of deflation is slowing. And that clearly benefited our businesses from PCs to servers, to storage. The actual material content in storage as a percentage of the sales price is actually smallest of all of our businesses. The spread

is the value we believe we bring by our differentiated assets, our capabilities, and features, mostly in the software. Typically, when cost increase, we are able to pass that through in time. It isn't 1 for 1 or on the nanosecond, the cost increase that we can change the price, given quotes and what's in the system, but we are generally efficient at passing through cost increases over time, and we'll do that here.

The signal is -- or given our purchasing capability and the scale of it. We tend to see that first. We tend to try to move first, and we have to be sensitive of how we price not getting ahead of the competitive environment of raising price, we become uncompetitive but able to do that in a prudent way where we're passing along our incremental cost as we see them in our business. That's how we've always done this. There won't be any difference in this cycle. You are correct. I anticipate a cost increase cycle in the future. I'm not good enough to tell you what day that's going to occur. I can tell you our reach and understanding into the supply base is really good, and those signals will be measured -- or pushed all the way through into our prices, and we will understand that. Yvonne, I don't know if I missed anything.

Yvonne McGill - Dell Technologies Inc. - CFO

No, no. I think you covered it.

Operator

We'll take our next question from Steven Fox with Fox Advisors.

Steven Bryant Fox - Fox Advisors LLC - Founder & CEO

Just on the pricing discipline that you're exhibiting here. For the quarter, you had better-than-expected sales and sort of as expected gross margins. Can you sort of explain how that flowed through? It seemed a little different than I would have expected. And then when you think about pricing discipline for the rest of the fiscal year, where would we see it the most sort of come through the income statement?

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

Well, from a macro point of view and then Yvonne will certainly weigh in here. When we think about pricing in Q2 in the second half, in many ways, it's business as usual. When you see a slowing market and you see excess inventory, you tend to see pockets of aggressiveness to move inventory to try to generate demand. We don't think the market is very elastic. As a result, we're very disciplined. And we are very disciplined in the profit pools. There were -- as I mentioned, and I think the previous question several back, there were units in the marketplace to go get, which tend to be in less profitable pools near 0.

And that's just not attractive for us. We're very disciplined in that regard. When you look at big deals, as Yvonne and I have said several times now, given the conservative nature or cautious nature, probably more accurately stated of enterprise-class customers and not as many large deals, they tend to be pockets of aggressiveness. But the market is generally stable outside of the areas that I just described. We see that in Q2.

As we go into the second half of the year, we'll see consumer -- it's consumer promotion time. We think consumer promos will be aggressive in the second half of the year, getting inventories back to historical levels, moving some of the old product that we know that's in inventory out there today, which isn't our issue. We're not exposed with any inventory because we run a very lean inventory model. We think those big deals will continue to be aggressive when they come about. They always have been.

So there's really nothing new there, just it's business as usual. Or if you prefer a similar pattern that we've seen before, we'll just be disciplined. There are places where it makes sense for us to acquire new customers. There's places where in a customer that we want to expand our portfolio. We call it cross-selling. We'll be very judicious and very disciplined in acquiring new customers and making sure that we can address as much of a customer's state with our portfolio as we possibly can. Yvonne?

Yvonne McGill - Dell Technologies Inc. - CFO

Yes. No, no, I'd echo that and say we continue to be focused on very price disciplined and focused on those core profit pools across the market. So feel good about that. And we always make investments where we feel like there's the proper return, future return, but very balanced, very disciplined.

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

Thanks for the questions Steve. Cindy, if we can take one more question and then we'll turn it back over to -- if you can turn it back over to Jeff for closing remarks.

Operator

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

Krish Sankar - TD Cowen, Research Division - MD & Senior Research Analyst

A quick one for Yvonne. Based on your full year revenue guide, it looks like your fiscal 4Q revenue should be up low single digits Q-o-Q, Kind of curious what's driving the strength in 4Q relative to 3Q? Is it ISG, CSG, seasonality? Any kind of color there would be helpful.

Yvonne McGill - Dell Technologies Inc. - CFO

So thanks for your question, Krish. In the fourth quarter, we do have a seasonally strong storage performance. And so we're expecting that again this year. So that's really what would be driving the differential in the fourth quarter.

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

Perfect. Well, thank you, everyone. We executed well in Q2 and delivered extraordinary results. Our model is driven by a unique set of competitive advantages starting from our position of strength with a broad portfolio of #1 positions, technology's largest go-to-market engine, the industry's leading supply chain and our world-class service organization. We remain focused on extending our leadership positions across PCs, compute, storage and applying our model to new opportunities. Michael, Yvonne and I will go into more detail of our strategy and other topics at our Securities Analyst Meeting on October 5. We hope to see you all there. Thank you.

Operator

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