TRANSCRIPT
DELL - 2023 Securities Analyst Meeting

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PRESENTATION

Operator
Please silence all mobile devices. Please make your way to your seats. The program will begin shortly. Please silence all mobile devices. Please welcome Rob Williams, senior vice president of investor relations.

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

Hello. Thanks for joining us for our 2023 Dell Technologies Securities Analyst meeting. Our press release presentation and related materials are available on our investor relations website. Definitely encourage you to look at those materials. There’s additional information and content in those materials. But before I get started, I get to do the fair disclosure and safe harbor and Reg G disclosure. So here we go. During this meeting,
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 our most directly comparable GAAP measures can be found in our meeting materials and SEC filings. In addition, statements made during this meeting that relate to future results and events are forward-looking statements based on current expectations. Additional results or actual results and events could differ materially from those projected due to a number of risks and uncertainties, which are discussed in our materials and SEC filings, we assume no obligation to update our forward-looking statements.

Turning to the agenda. Based on your feedback, we'll focus most of our time today on Q&A. We'll begin with short presentations from Michael, Jeff, Arthur, Sam, and Yvonne. We'll then take a short break and reconvene for Q&A with the full team, including Jeff Boudreaux. After the meeting, we'll host a management reception outside and that'll be directly following the meeting. With that, I'd like to turn it over to Michael.

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Michael Dell - Dell Technologies Inc. - CEO & Chairman

All right. Thank you, Rob. Good morning, everyone, and thank you for joining us. It's great to be with all of you today. Meeting with customers, the interest in the technology and the solutions that we provide is high. And the amount of data in the world continues to grow at a tremendous rate.

And whether it's the workplace solutions or multi-cloud and as a service made simple or intelligence at the edge, and now AI and generative AI, all of that takes a lot of what we offer to our customers. And we are incredibly well positioned for the next wave of expansion, growth, and progress in the industry.

This spring, it'll be 40 years since I launched Dell from my dorm room at the University of Texas. And in each wave of those 40 years, our company has innovated, evolved and succeeded. When the conversation with customers was moving beyond PCs to the data center, we did too with PowerEdge, which is now the number one leading server line in the world.

And when some questioned the future of the PC, we doubled down on PCs. When some thought that data centers were going to disappear into the cloud, we became the largest storage company on the planet. And with each wave of innovation, an echo chamber proclaims the death of everything that came before it. But the reality is that the TAM continues to expand with new use cases. And by seeing opportunities that others often ignored, we've grown and strengthened through every shift.

In FY 2023, we delivered $102 billion in revenues. And this year we are in a bit of a down cycle as customers digest those enormous investments in the past few years. And we expect to deliver revenues of almost 90.5 billion. And regardless of where we are in the cycle, we effectively translate our revenue into cash and earnings per share.

Over the past five years, we've delivered more than $36 billion in adjusted free cash flow and $30 in non-GAAP earnings per share. And since we met two years ago, we've grown earnings per share at a 10% compounded annual growth rate and generated $10.8 billion of free cash flow. And since the VMware spend, we have returned more than $5.5 billion to our shareholders.

And since the inception of our capital allocation policy, we've returned more than 90% of our adjusted free cash flow to our shareholders. Solid performance and proof that our model is tuned to deliver results consistently over time, excelling in the up markets, but also optimize when the underlying demand is more challenging.

We also deliver on our promises. We delivered on our long-term value and capital allocation frameworks. And we announced further improvements this morning. We simplified our capital structure. We reduced our core debt by $38 billion since the EMC transaction, and we distributed our VMware shares to Dell shareholders in a tax efficient way. If you held onto them, you're very happy now.

We've repurchased $4 billion of our stock, and we instituted a dividend and increased that dividend by 12% at the beginning of the year. And let me be very clear, future cash flows will be returned to our shareholders. We've also strengthened our governance and enhanced our board.

Earlier this year, we elected Ellen Kullman as our lead independent director, and this past week we appointed Steve Mollenkopf as our newest independent director. All of our board committee members are independent, and we established a separate compensation committee independent of our nominating and governance committee.

We are happy as a publicly traded company, and we plan to stay that way. We're also encouraged about the potential for future inclusion in the S&P 500 index. And as I look to the future, we have a simple but powerful strategy, leveraging our strengths to extend our leadership and capture
new growth.

We're utilizing our unique operating advantages, including leading end-to-end solutions. The industry's largest go-to market engine, the world's leading supply chain of services and global footprint in 180 countries. We are number one in 20 categories. Number one in external storage, number one in high end storage, number one in X86 servers, number one in mainstream servers, number one in client revenue, and many, many more. And with all these leading positions in so many areas, we make it easy for customers to choose Dell. And we're extending those leading positions through consistent share gains.

These categories are also growing, and we're positioned to capture that new growth. Infrastructure is increasingly multi-cloud and there's going to be significant growth at the edge. Multi-cloud is becoming the norm as companies look to avoid vendor lock-in, optimize costs and meet regulatory requirements. Customers have evolved their thinking to understand that multi-cloud is the answer. 90% of customers already have on-prem, colo and public clouds.

And there are many reasons for this. First, when you move workloads to the public cloud, customers end up with multiple silos and begin looking for ways to make all of the clouds, including the on-prem cloud, look like one system. Customers have also learned that some workloads cost far more to run in the public cloud.

Three years ago, many CIOs thought that lift and shift was a good idea. While it does technically work, the vast majority have now come to learn that it often costs twice as much as a modern data center solution. For those cloud native apps that do work well in public clouds, customers are increasingly architecting those apps so that they are not locked into a specific cloud provider, including the ability to run them on their own infrastructure.

Also, the cost of replicating data in every single cloud is very excessive giving rise to many customers putting their data in a neutral colocation facility that's one hop away from accessing services from many different clouds. And for many customers there are regulatory, security or other sovereign data requirements and challenges. And we continue to win significant projects as customers rebalance their cloud mix.

In addition, our fast-growing Apex cloud services give customers a public cloud-like experience that runs in their data center or in colos and it's offered in an OpEx and consumption model. To be clear, we're also partnering significantly with all of the public clouds to make multi-cloud a reality for customers. AI and now generative AI is the latest wave of innovation. And fundamental to AI are enormous amounts of data and computing power, two of our core businesses.

Most companies have figured out that the data that they have is among their most valuable assets. And most of the enterprise data is stored on-prem. And while companies want to use these new AI capabilities, they don't want to give away their data. Also, don't be surprised to see massive growth of data at the edge in the physical world. And because data has gravity, we expect it will be more common to bring AI to your data as opposed to the other way around.

It's also becoming clear that the recent advances in generative AI could represent a 20 to 30% productivity and efficiency improvement opportunity for many activities across the economy. That has never happened before. And for us and for many of our largest customers, it's become our number one priority.

If you look on the skyline here in Manhattan, all the big companies that have logos on their buildings inside every single one of them, they are turning the place upside down to figure out how they can use generative AI to advance their business in a meaningful way. And that initiative is driven from the CEO and the board, not so much from the IT organization.

As a result, it feels to us like we are at the front end of a significant TAM expansion. In a moment, our vice chairman, Jeff Clarke will get into much more detail about our strategy and competitive positioning. Our CFO, Yvonne McGill will walk you through our financial performance and our business unit presidents, Sam Burd and Arthur Lewis will share a deeper look into our PC and infrastructure businesses. But first a couple of closing thoughts.

Over the last 40 years, I've had the privilege of leading this company to be at the center of four decades of technology innovation, which I believe has been the greatest force of human progress in history. And throughout each of those waves of innovation, new technology has emerged, and our opportunity grows. And each time we have been able to extend our leadership and capture that new growth.

And we stand today at the beginning of the new generative AI era, perhaps the biggest opportunity in Dell's history and for the next wave of human progress. And I couldn't be more engaged, optimistic, and excited for our future. And with that, I'll turn it over to Jeff Clarke, our vice chairman.
Good morning, everyone, and welcome. It’s good to be here. It’s been a long time since we’ve been in New York. Ben and I were talking earlier, it’s been four years since we’ve held a Live event. I’m going to build on what you just heard from Michael and what really makes Dell incredibly special, uniquely positioned to win and delivered the long-term growth that Yvonne will talk to in a few moments.

But I want to start with a fundamental and undeniable fact and Michael hit on it, but I’m going to hit it right in the middle, which is technology and data are central to well, everything, home, work, school, our social lives, how we do commerce. Technology is so essential to everyday life. Can you imagine a day without it? It’s core to how businesses run today, tomorrow, and beyond.

And I certainly believe having been at this a long time, it’s only going to get better. It’s here to stay. It’s not going anywhere. And through this broad use of technology in this ever-digitizing world, data is growing exponentially. A hundred zettabytes of data was generated this past year and IDC projects that it will nearly triple by 2027. Technology spend continues to outpace and GDP continues to increase. It’s up 3% or up 70 basis points over the past five years. And by 2027, the technology market is projected to grow to $6.2 trillion.

And we’re even excited about what’s at the future and looking at even more growth because we view generative AI as an inflection point. In many ways, we’ve spent the last 40 years innovating to build the foundation for generative AI to be the fastest ever adopted technology in our industry. AI or generative AI will change the way we work. It will change the way we service and support our customers. It will change the way we innovate and deliver products. It will improve decision making and business outcomes. And my personal favorite, it’ll allow all of that to happen faster at the speed of Dell.

And if you think about how companies are dealing with today, Michael touched on this briefly, but business leaders today, 64% of them believe generative AI will help them gain an advantage over their competitors. 70% of enterprises think AI changes the rules of the game. 65% of enterprises think AI changes the core fundamental cost structure and will disrupt their industry. And 60% think AI will upend the fundamental product delivery and product differentiation they have in their businesses today.

As such, four use cases are emerging very quickly in generative AI. They center around customer experience and servicing your customers differently. Software development, the world of sales and content creation and management. And as Michael pointed out, this is a topic for all companies.

Maybe my sense of this or interpretation, and I’d like to be so crystal clear about this. Generative AI will change the basis of competition fact. And it will leave those companies who don’t embrace it, don’t figure this out behind and uncompetitive. And generative AI brings an entirely new perspective on data and computer computation. The data sets are comprised of symbols, images, texts, they all grow.

And the projected growth of tokens, which is a good proxy of what is coming our way, is going to grow by a 100X by 2028. That’s a 100X by 2028. Purpose built accelerated computing, big and small for training, for tuning, for inference will be needed. These will be highly optimized for these generative AI workloads. And organizations need a data strategy to harness the massive amounts of unstructured data being generated by machines, sensors, smart systems, all outside of the data center.

And to maximize the benefits of generative AI, an end-to-end solution that’s required. The right sized infrastructure, a data plan, likely open source software models and the services that are wrapped around that to enable workloads to move across the clouds on-prem and at the edge. Generative AI is clearly a case of one model, one size, one infrastructure. Architecture does not fit all. There will be many, many instances and permutations of how generative AI will be deployed.

And most organizations, as Michael said, have data that’s too sensitive for training off premise with compliance challenges, fundamental IP about their business that are critical about how they run in their unique competitive advantages. They’re not going to want to see that data leave the premise. In fact, Gartner has recently said 83% of all data’s on-prem that plays to our strength.

IDC projects that 50% of GPU accelerating computing spin is expected to be on-prem and at the edge by the end of the year. And this will be in various forms. If you think about accelerated computing and the way that generative AI is evolving, it’s going to be fascinating to see customers take that and to really create and use domain specific field of study specific and process specific models on their own data or with their own data I should say, to train and tune those models and run inference where the data’s created.

Think about a smart factory doing heavily process automation, creating real-time data. AI is going to follow where the data’s generated, where the data’s created. Those resources are going to be at the edge of the network doing computation, storing information. And that’s an exciting opportunity for us. I think about these AI workloads being very, very different than traditional applications in the data center.
We know from our research and our understanding of the technology that these workloads require various forms of accelerated computing typically optimized for massive parallel data processing. That’s very different than how traditional applications through the data center had been built. Most traditional applications can’t take advantage of that type of parallel processing and won’t benefit from accelerated computing. Thus, we’re bullish that AI expands the TAM for technology spending.

The AI hardware and services market is projected to grow at an 18% CAGR over the next few years to $124 billion. This creates a tremendous opportunity for us to innovate and serve our customers better. For example, the PowerEdge 9680 is the fastest ramping solution in the history of our company. The 9680 is the fastest ramping new technology solution that we’ve ever done in the history of our company. And it’s built on many years of success selling GPU based servers.

And if I think about our first half, we talked about this in our latest earnings call. In the first half of this past quarter or first half of the year, 20% of our server order revenue is AI based with a sizable backlog and maybe an exciting category given my background. And we have AI assistance coming to the PC and you’re going to need a brand new high performance PC to take full advantage of what I think is the next killer app on the world’s greatest productivity device.

This will drive a refresh cycle for commercial PCs where we are the industry leader. I know Sam will touch upon this in his comments, but what an exciting opportunity to see AI extend from the edge of the network in factories into the data center, out to the cloud and back out to the PC, it’s an incredible time.

And to think about this and to summarize it, we’re only in the top of the first inning in generative AI. There are so much more to come. This is a multi-decade cycle, a multi-decade cycle with tremendous opportunity and with a ton of change, silicon architecture models, algorithms yet to come. This is very different. I hope you can tell it’s very exciting for us and we’re ready. It’s a tremendous opportunity for us thinking about where data is, the computational resources that exist and are going to be needed. Wow plays to our strengths and what we’ll be doing going forward.

Michael touched on our strategy earlier and I like to go deeper on talking about how we’re going to address these opportunities. And he hit upon this, which I think is important. There’s a key word. We’re leveraging our strengths in this word of extend, extending our model, our leadership, our way of doing business into these new opportunities for incremental growth.

Our operating model is very unique. It’s something that has differentiated us in the industry for 40 years now. And if I think about in applying it to some of the new categories that Michael mentioned, PCs in a historical category, but our ASPs are 2X the industry. We have the unique ability to sell a richer configuration than our competitors, primarily driven by attached services and a plethora of peripherals, most notably flat panel monitors and docs.

That word is going to be used a lot. We’re extending our model to provide and sell a broader range of Dell branded peripherals. And we’re going to use our data from our services organization, our telemetry data to build more tailored services and use AI to provide those differentiated services around our PC going forward.

In telecom, we’re using our industry standard hardware and software defined architecture to accelerate the telcos’ modernization of their network, to help them modernize with virtualization, containerization using our infrastructure blocks all around and supported by our carrier grade services on the way to O-RAN, which is still futuristic as we think about it.

And multi-cloud, the preferred operating model of our customers. We’re simplifying cloud complexity by supporting workloads on-prem at the edge or in public clouds delivered through Apex with our SaaS control plane on our proprietary software defined storage substrate.

At the edge, our NativeEdge platform is built to simplify edge operations by enabling centralized deployment, lifecycle management and a zero touch manner with zero trust infrastructure. And if I wasn’t clear, generative AI is an extension extending our compute basis further with the upside opportunity for our unstructured storage assets like power scale and object scale, all surrounded by Dell Services.

Our model with its unique operating advantages differentiates us in the marketplace. Michael talked about our number one positions in our leading industry solutions that go from the edge of the PC all the way through the data center. We have the largest go-to-market engine in our industry.

29,000 go-to-market team members and 240,000 global partners that give us the broadest reach from consumer to the largest multinational companies around the world, which gives us great insight in the ability to build deeper relationships. And our omnichannel approach gives the customers of all types, the choice and how they want to learn, buy, consume, and be supported by Dell.

We have the industry’s leading supply chain that runs at global scale, yet nimble and agile enough to respond to the macro and market fluctuations
with built-in resilience. We are very capital efficient in our supply chain. We have the industry’s leading inventory levels while providing our customers with maximum choice.

You couple this with our global direct service organization, which is unmatched in our industry with more than 30,000 service and support team members in 2200 service centers in 170 countries, we can get parts and people anywhere. We can service our customers anywhere in the world.

And what’s really rich about a direct service organization, we get the telemetry data from our install base, match with that broad reach and we can tailor our offers and change our products and offers that best serve our customers. So this foundation of leading solutions, the largest go-to-market engine, the leading supply chain, the largest direct service organization in our sector is the foundation that drives our operating model. It’s the basis of our consistent execution. And I know Yvonne will build on this, but you couple that with the financial discipline of our company, you get a tremendous ability to generate consistent significant cash flows.

Our operating model coupled with our financial discipline, gives us the ability to drive consistent and significant cash flow. And Yvonne will touch on this in just a few moments. And perhaps our greatest superpower that we don’t talk a whole lot about, but it was on the bottom row of Michael’s chart and bottom row of mine here is the culture that we’ve built.

We’ve built a special culture over the past 40 years. It has this grit and determination to overcome, adapt, and improvise anything we’ve encountered. We’re customer first, we can do and we’re tech optimist. And our team, the culture we’ve built gives Michael and me this confidence that we can deal with the pace and change of our industry. Heck, we’ve been doing it for four decades now.

So we get excited about what’s coming, AI just the next thing. And there’s a whole slew of things coming beyond that, whether that’s quantum, whether it’s digital twins, whether it’s an amorphic computing. Our industry is not static, it’s dynamic. We’ve built a culture and a team that does not panic, in fact embraces change. And there’s no doubt there’s more coming, there’s more beyond AI. Als got the time today. I think it’s multi-decade in nature, but there’s more change and opportunity coming, but in the meantime, we have plenty to do.

So in closing, this is my 37th year at Dell and I’ve never been more optimistic about the future of our company. I love this company, I love our team and most importantly, I really love our hand with where we are today. We have plenty to do and we’re focused on maximizing our opportunities. And with that, I’ll turn it over to Arthur Lewis. Thank you.

Arthur Lewis - Dell Technologies Inc. - President of Infrastructure Solutions Group

Thank you, Jeff. Good morning, everybody. I’m really excited to be here to talk about our ISG strategy. As you’ve heard. And as you know, data is growing at an exponential rate and is becoming the world’s most valuable asset. In addition to volume, the nature of the data itself is changing, including more unstructured data in the form of text, videos and images, more latency sensitive data and more data being created at the edge.

Infrastructure is adapting. Compute is following data to the point of the data’s creation. Accelerated compute and memory bandwidth are growing, and more customers are leveraging AI and ML. With the data era in full swing, it’s good that we know a little something on the topic being the world’s largest provider of data storage systems.

Artificial intelligence, leveraging machine learning, deep learning, and now generative AI will be a force multiplier to digital transformations around the world in that it will drive record levels of productivity and allow businesses to serve customers in new and unique ways. To unlock the power of artificial intelligence, however, a modernization is required.

In order to train fine tune and inference off of data effectively, customers will have to standardize and automate processes, tool chains, workflows. They will have to rethink data storage and data pipelines, breaking down silos to mobilize data more than ever before. And they will need to think through intrinsic and zero trust security. In short, architectural silos will be dismantled.

And the dismantling of architectural silos and the simplification of IT will not only unlock the power of artificial intelligence, it will also allow businesses to shift research and development dollars away from managing complex walled gardens of technology towards the much more valuable work of creating infrastructure that enables the developer community.

To accommodate for this business transformation, modern architectures and open ecosystems will be needed. These modern architectures will be software defined. They will be dense, they will be flexible, they will be secure, but most importantly, they will be built to support AI from edge to core to cloud. Our strategy does just this. The breadth and depth of our portfolio and that of our talented team puts us in a uniquely advantaged position. We continue to demonstrate innovation in our portfolio that’s led to long-term growth, margin expansion and share gains.
Over the last six years, ISG has grown revenue at a CAGR of 3%, operating income at a CAGR of 8% and expanded operating margins 330 basis points. On a go forward basis with AI as a tailwind, we expect ISG revenue to grow at a CAGR in the range of 6-8%. We are number one as Michael and Jeff have noted in server and storage by a wide measure, and we are a structural share gain leader.

16 generations deep into our PowerEdge portfolio. We are the leader in compute systems with products that are purpose-built to support a wide range of workloads across every industry use case. Intelligent with high levels of automation and operational efficiency and cyber resilient.

Our portfolio is further optimized for artificial intelligence with the XE9680, the XE9640, and the 760xa leading the way for accelerated compute and the balance of the portfolio for general purpose AI optimized compute. Given our high level of innovation and strong customer adoption, we are number one in mainstream server revenue share and have been for 21 consecutive quarters.

Over the last 10 years, we have gained 980 basis points of share. That's 2000 basis points in North America, 1,900 basis points in EMEA. Worldwide, and over this same period, the market has grown $26 billion. Dell has captured 43% of that's growth. That is more than the next four competitors combined. We are also number one in data storage systems and have been for 21 years. We are larger than number two, number three and number four combined. We lead in every storage category, block, file, object, hyper-converged infrastructure, all flash arrays and data protection.

Our primary storage portfolio has seen major launches over the last 12 months where we've added 500 new features to PowerMax, PowerStore and PowerFlex. PowerStore is the leading mid-range array in the market in the fastest growing segment of the market. Number one in customer satisfaction and has grown every single quarter for 12 consecutive quarters since its launch in March of 2020.

PowerFlex is our software-defined solution for primary storage and has grown for eight consecutive quarters, growing triple digits in Q2 as customers look for more software defined flexible scale out storage architectures. Our unstructured portfolio is the undisputed leader in Gartner Magic Quadrant due to the many offers and services across workloads as well as the vertical platform integration that gives customers choice in hardware. Our unstructured portfolio is further optimized for AI with technologies like GPUDirect and NFS over RDMA.

Since the EMC acquisition, we have gained 250 basis points of share in storage. 620 in North America, basis points that is, 850 basis points in EMEA. Worldwide and over this period, the market has grown $7.6 billion and Dell has captured 38% of that growth, more than any single competitor in the market.

Our various number one positions put us in a position of strength of deep enterprise expertise and we serve 99% of the Fortune 500. And with a total available market of $265 billion, we have ample room for growth as we continue to take share. Building from a portfolio of strength, the technology trends also are heading in our favor.

Number one, it's a multi-cloud world and Dell delivers multi-cloud by design. We are building public cloud extensions from our software-defined portfolio that will give customers common management and operational simplicity both on-prem and in the cloud. And we are building even further flexibility for customers by connecting all of the storage protocols via a common storage substrate layer.

Adding in capabilities like AIOps and FinOps gives customers the opportunity to truly optimize where their workloads are run. Moreover, in partnership with Microsoft, VMware and Red Hat, we're creating Apex cloud platforms giving customers the ability to run hyperscaler services on-prem.

Number two, distributed IT. As Jeff talked, 50% of the world's data is being created outside of the cloud and outside of the traditional data center. It is being created at the edge. This is where the real world lives. Our solution targets edge environments that are highly vertical, highly siloed and highly fragmented. The Dell NativeEdge is an incredibly elegant solution that marries infrastructure, infrastructure management and application orchestration in a zero trust, zero touch manner.

Number three, the standardization of the telco stack. The radio access network is transitioning to industry standard specifications for virtual and Open RAN, allowing for X86 compute all the way to the cell tower. We have a purpose build portfolio of energy efficient servers that meet the physical extended temp and operational simplicity controls that telcos require. We have also built integrated solutions with Wind River and Red Hat to provide bare metal automation for lifecycle management and remote field operations.

Number four, the proliferation of open frameworks and tools. We provide developers with options for software and tools. We do it because we want to allow them to take advantage of the rapid innovation in the industry and to foster a community approach to the standardization and democratization of technology. For example, developers can access a portal on dell.com and very easily download the latest APIs for Dell products including Cloud IQ, our AIOps platform.
And number five, a cloud-like experience. Apex serves the dual purpose of providing customers with the operational consistency and common management that they need on-prem and in the cloud, while also offering customers a flexible consumption model for the entirety of the ISG portfolio.

In addition to these five, artificial intelligence with generative AI as a catalyst for even greater data utilization will drive a wave of growth for us. The explosion of unstructured data demands AI to process it. Today's compute makes that available in ways previously not there. While the early chapters of this story are around the brute scaling of parameters in large foundational models, we look forward to a future of algorithmic innovation that will drive enterprise demand and scale and efficiency, excuse me.

IDC projects the AI market to grow to $124 billion by 2027. In addition, 75% of enterprise customers surveyed indicate that they will be adding to their IT budgets to fund the build out of IT infrastructure. These deployments will be hybrid to the extent deployments leverage confidential IP, customer financial data, they will trend on-prem. Those that don't will be subject to our company's policy.

And even where deployments leverage large public foundational models, prompts will often be engineered to take advantage of on-prem expansion, compute, and storage to accommodate vector stores of embedded context data. Today, what we see is the build out of very large training infrastructure like the 9680 as the tier two cloud service writers race to stand up infrastructure to support AI as a service companies.

As enterprises grow, we expect to see a much stronger balance of training and inferencing and a heterogeneous world in which accelerated and general compute optimized for AI are both needed. Today, enterprises face a number of issues in the deployment of a generative AI workload. Those issues range from use case targeting, model selection, data preparation, architecture and infrastructure options as well as user experience.

We have a three-pronged strategy to really simplify how customers tackle these very complicated problems. Prong number one is a deep and broad AI portfolio. We have purpose-built optimized solutions that can be sold standalone or as part of reference architecture that span compute, storage and networking.

The XE9680 is differentiated in the market as Jeff pointed out. It's the fastest growing product in ISG history. And we've recently added to the portfolio. We launched the XE9640, which is the four-way sibling to the 9680 as well as the 760xa. We can also provide customers with storage alternatives for the large amounts of unstructured data that’s being created with our software-defined power scale and object scale lineup. We wrap every solution with high-end Ethernet fabrics to really enhance the performance and tuning of models.

The second prong of our strategy is to partner with the broader software ecosystem. We will provide curated containers for Dell solutions across the more popular open source LLMs with ready to deploy automation for developers. We will also enable an enterprise hub environment to allow customers to manage their models and data sets with secure governance and controls. And we will enhance the user experience by providing blueprints for data pipeline management, fine tuning and model deployment.

The third prong of our strategy is to really build out our consulting and professional services. And these services will include use case targeting, model selection, data strategy, architectural and infrastructure options, as well as user experience. And of course, all of our solutions will be available as a fully managed service.

In closing, the markets we serve are large and growing the breadth and depth of our portfolio, that of our talented team, the technology trends, all coupled with Dell's unique operating advantages put us in a most enviable position to capture the opportunities afforded in the data era. Thank you. And with that, I'd like to welcome Sam to the stage.

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**Sam Burd - Dell Technologies Inc. - President of Client Solutions Group**

Hey. Thank you, Arthur. Great to be here with you this morning. And talk about our PC and client solutions group, it’s where Michael started our business nearly 40 years ago. And while in the ensuing 40 years, we've built an incredible breadth of leadership infrastructure capability that Arthur just covered.

Today, we are more excited than ever about the future of the PC and its role as the world's preeminent productivity tool. We know this business well. We doubled down while others doubted and have built a differentiated approach that leaves us operating from a position of strength. We're number one in the spaces that matter most; client revenue workstations, high-end gaming monitors.

And we've gotten there by delivering on the needs of some of the most demanding customers in the world. Customers who value systems that deliver unmatched performance, productivity, innovation to power their workforces and business success. We found along the way helping customers is good for our business.
We're consistent structural share gainers. We've gained nearly 10 points of share in commercial PCs, 9 points of share in displays over the past decade. We've delivered long-term revenue and operating income growth across economic cycles. How have we done that? We've done that by operating a differentiated business model with disciplined execution.

Fundamental tenant of our business model is a belief that not all units are created equal. We've focused on the segments that have durable growth and are our highest value commercial PCs, premium consumer, including high-end gaming. And as Jeff described earlier, we target these segments with a differentiated go-to market team. A team that hears directly from customers and can anticipate their needs. Because of that, our mix in this business is differentiated. Over 80% of our units, more than 90% of our revenue come from these segments.

This helps us drive differentiated results. Jeff talked about our total revenue per unit is nearly two times our competitors and that advantage is expanding while industry revenue is back to pre-pandemic levels, our revenue, $5 billion higher. And we've increased our share of the higher profit pool businesses. Our commercial revenue mix is 8 points higher. SMB mix up 2.5 points, software and peripherals mix up 5 points. Our services attach rates up 10 points.

Why does that all matter? That leaves us poised to win and extend our advantage in a space where we expect long-term TAM growth. I'll share with you three reasons why we're excited about the future in this business. First reason, over the last three years, our industry shipped nearly one billion PCs leaving us sitting on the largest commercial install base in history. Now more bias to notebooks ready to be refreshed. If you couple that with a Windows upgrade cycle where we have hardware requirements that many older devices cannot meet, we're in a market that's poised for growth.

Second reason, future workloads are AI workloads and that is a winning opportunity for the PC. AI promises immense productivity benefits for PC users, and we believe the advances in gen AI and the devices that power that capability will be as revolutionary as the early days of the PC. We're not new to AI. Our commercial PCs are the world's most intelligent with AI enabled software like Dell Optimizer.

We're the leader in workstations where our systems are running 5 million to 500 million parameter AI models locally. And not surprisingly, last quarter we saw a demand for our workstations grow. In fact, if any of you are in the market for systems, we just launched some new systems that house up to four GPUs can cost effectively run complex AI workloads locally with low latency while keeping customers' proprietary data inside the four walls of their enterprise.

Customers are eager to get better productivity tools in the hands of their end users. And the good news we have for them is that next year we'll have PC architectures with next gen CPUs, GPUs, the addition of NPUs and accelerators that will effortlessly handle more complex AI workloads. In fact, we see a world where onboard AI processing will become an expectation in PCs, driving higher configurations and larger ASPs, our sweet spot.

Third reason I'm excited, hybrid work is here to stay. And the PC ecosystem where we're focused on expansion is more important than ever. Hybrid works become the new normal. Many people in the room live that every day. In fact, 60% of US workers are expected to work in a hybrid model by 2026. These customers, they need more than a PC to work from everywhere. They need a comprehensive ecosystem of peripherals, software support, services to be as productive as possible in the place, space, pace at which they'll work.

We are already the leader in the $30 billion display space and we're going to extend that advantage and expertise into core peripherals. That's an additional $40 billion of TAM, includes things like keyboards, mice, headsets, cameras, and of course docks where we already have a stronghold. Our intent, capture our fair share of this TAM with a margin profile that's accretive to our business.

To do this, we have spent the past year organically building out a full portfolio of peripherals, creating a superior customer experience through software and AI like Dell Optimizer, Dell Pair, Dell Peripheral Manager. These peripherals will create a seamless extension of a customer's PC experience, further enhancing their productivity and allowing them to collaborate and interact in natural ways. Our unique operational advantages also work to our favor here. With the industry's largest go-to-market engine, we're creating a simple and effective purchase experience for customers to drive high attach with each system sale.

And now before I hand it over to Yvonne, I'd like to leave you with this. Number one, we have a proven track record of execution excellence in this business. Number two, we are focused on the highest value segments in a space where we expect long-term TAM growth a good thing.

Number three, with our differentiated business model and unique operational advantages, we are well positioned to capture growth and expand our share. And finally, number four, this expectation of success is captured in our long-term framework revenue growth of 2-3% that we have communicated for CSG. Thanks for your time this morning and now I'd like to invite Yvonne up to the stage.
Yvonne McGill - Dell Technologies Inc. - CFO

Thanks, Sam and hello to everyone. I'm so happy to see you all and I know I am in between you and a break. So why don't we go ahead and jump in. Over the next few minutes, I'll walk you through our updated long-term value creation framework and capital allocation plan. But before I do, I want to reinforce something you've already heard today.

Our operating model is unique. It underpins our track record of innovation, execution and shareholder returns. It allows us to adjust, remain agile and deliver results regardless of the marketing conditions. And over the last four decades, we've done just that, navigating numerous cycles while achieving steady growth, which is why we are so confident in our ability to keep growing and keep delivering value to our shareholders. So let's jump into the framework.

We believe we can deliver revenue growth of 3-4% outpacing GDP. We've increased our EPS growth target to 8% plus growing faster than revenue. Given the growth we expect to see in the business, compounded EPS growth and our negative cash conversion cycle, we expect net income to adjusted free cash flow conversion of a 100% or better.

We're focused on executing a business model that consistently delivers strong cash flow. We target returning over 80% of adjusted free cash flow to our shareholders, up from 40 to 60%. And we've committed to grow the dividend 10% or more annually through FY 2028. So let's talk about how we'll deliver against this framework.

Our strategy is to leverage our strengths to extend our leadership positions and capture new growth opportunities. We drive this through a set of unique operational advantages. You've heard about them all already today. First, our broad portfolio of number one positions. Second, the industry's largest go-to market engine, fueled by deep customer relationships. Third, the industry's leading supply chain. And finally, our world class services organization.

We believe the business will deliver revenue growth of 3-4% over the long term in excess of GDP. This is underpinned by 2-3% long term growth in CSG and 6-8% growth in ISG. Across the business, we're focused on the most stable and profitable segments of the market. As you heard from Sam, this is commercial, peripheral, small and medium business, premium consumer and gaming in CSG. There's a large ecosystem around the PC and our direct sales team is positioned to capture it.

Our ASPs are approximately two times the industry average. Due to our ability to sell a more richly configured PC with services and peripherals. We have a consistent track record of strong, relative performance and are number one in client revenue. North America PCs, monitors, high-end gaming and workstations. The commercial PC alone, we've gained 10 points of share over the last 10 years and grown our commercial mix more than 8 points since FY 2019.

The story for ISG is similar. As Arthur said, we are far and away the number one player in storage, larger than number two, three, and four combined. We have leadership positions in virtually every storage category and a leading unstructured external storage portfolio. But we still have opportunity to grow, especially as we focus on high margin IP software offerings like PowerFlex.

In servers, we have a track record similar to commercial PC gaining over 10 points of share over the last 10 years. As the teams outlined earlier, our business has significant tailwinds. AI drives incremental growth opportunity and an inflection in our business from the PC to the data center and out to the cloud.

Now, let's talk about EPS growth. We expect non-GAAP diluted EPS growth over the long term of 8% or better faster than revenue. We have three key operational levers to enable EPS growth in any demand environment. First, gross margin accretion. We can achieve this through increasing our mix towards our more profitable segments like commercial PC, peripherals and overall mix to ISG.

We've maintained strong gross margin rates over the past six quarters, even in a declining demand environment. We remain focused on discipline cost management. For example, since before the pandemic, we've pulled out operating expense of approximately $1.4 billion. And as we've demonstrated over the last two years, we will opportunistically repurchase shares. We've repurchased $3.4 billion of shares since introducing our dividend in the first quarter of FY 2023. These are levers that to a large extent we control and will manage through all economic cycles as we continue to optimize cash in all environments.

Now, let's talk about cash flow. We have a strong cash flow engine. This is not a new phenomenon from Dell. We've largely been cash flow positive for the last four decades. After the EMC transaction, we were focused on reducing debt and achieving investment grade and we did that in over a five year period, reducing core debt by more than $25 billion.

Since FY 2019, we've generated over $25 billion of adjusted free cash flow and have demonstrated a strong track record of shareholder return.
Over the last six quarters, we've averaged over 90% of adjusted free cash flow return to shareholders. We have a business model built to generate cash and it starts with growth. We know we can achieve consistent GDP plus growth over time by extending our leadership positions, making accretive investments, and by optimizing our go-to-market engine.

Our focus on financial discipline is a differentiator. Discipline pricing, laser focus on our main profit pools, leveraging our supply chain scale and cost management. And as always, we remain relentlessly focused on working capital. We have a differentiated cash conversion cycle of negative 50 days. We also have a low inventory model and access lower cost components faster than our peers. All in, this allows us to achieve net income to adjusted free cash flow conversion of 100% or better, which sets us up nicely for our updated capital allocation framework. So let's talk about that.

We target returning over 80% of adjusted free cash flow to shareholders. We have two levers to achieve this. First, we committed to growing the dividend 10% or more annually through FY 2028. And second, we will continue to opportunistically buy back shares with the balance of adjusted free cash flow. And I want to highlight that the board of directors recently approved a $5 billion increase to our existing share repurchase authorization.

We remain committed to our investment grade rating, our 1.5 times core leverage ratio target and to M&A, which remains focused on tuck-in IP accretive opportunities that accelerate our strategy. As we wrap up today's discussion, let me leave you with a few thoughts. We've built a company that's positioned to be the preeminent IT solutions provider. We have the broadest portfolio in the industry with leadership positions across all our core markets. We've innovated and demonstrated structural share gains across every economic and IT spending cycle.

At the end of the day, our strategy is simple, extend our number one leadership positions and use those leading positions to capture new market opportunities. This strategy coupled with our P&L leverage, strong cash generation drives a resilient long-term financial framework and capital allocation plan.

And to reiterate what we've committed to today. We expect to deliver 3-4% revenue growth, 8% or better growth in non-GAAP diluted EPS. Net income to adjust to free cash flow conversion of 100% or better. Over 80% return of adjusted free cash flow to shareholders and annual dividend growth of 10% or better through FY 2028. We believe that technology trends and tailwinds will continue to be strong over the long term.

And our strategy, our unique operating model and culture, position us to meet the evolving needs of our customers from end to end. We're excited about the future and confident in our ability to create meaningful long-term value for stakeholders. Thank you so much for your time today. We're going to take a short break and then meet back here for Q&A.

QUESTIONS AND ANSWERS

Operator

The program will resume in 10 minutes. The program will resume in 10 minutes. Please make your way to your seats. The program will begin shortly. Please silence all mobile devices. Please make your way to your seats. The program will begin shortly. Please make your way to your seats. The program will begin shortly. Please make your way to your seats. The program will begin shortly.

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

Are we going in alphabetical order?

Michael Dell - Dell Technologies Inc. - CEO & Chairman

It's got them in. Rob's very bright. I should put my sunglasses on.

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

All right. Great. Thanks to everyone. Thanks for coming back here quickly. We've got about 70 minutes allotted to Q&A and just want to spend a lot of time on Q&A today. Just as a reminder, please introduce yourself and your firm. It's a little hard for us to see sometimes with the lights, so that'll help us out to know who we're getting the question from. And I see someone here on the front row who's ready to go right off the bat. And
let's start with Amit.

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

Thank you very much, Amit Daryanani, Evercore. I guess two questions if I may. First thanks for the presentation. It was concise and effective, so that was great. Yvonne, one of the questions I guess folks will struggle with is, 3-4% revenue growth, 8% EPS growth. Can you just help us think about what’s the baseline that you’re assuming this on? Is it 2023, 2024? Just help put that in context. That would be helpful.

And then Michael, for you, if I think about the buyback that you folks are talking about. And assuming it’s 6, 7 billion of free cash flow, a billion in dividends, how do you think about the liquidity? Because if I think about how much Dell liquidity is out there that you don’t own, it would almost imply you could buy back 20, 25% of the flow that’s not owned by you. Is that the magnitude of buybacks you intend to do? And how do you factor in the liquidity on the stock in that narrative?

**Yvonne McGill - Dell Technologies Inc. - CFO**

Let me jump in. I will start with the 3-4% revenue growth just to kick it off. As we're thinking through the opportunity that we have going forward, we did talk about the 2-3% in CSG, the 6-8% in ISG. And one of the things we want to make sure that we're also calling out is we do see a little bit of pressure in our other businesses, with the changes coming through with VMware. And so really balancing that out. But feel strongly about that 3-4% revenue growth over time.

We talked a bit about the - you're asking Michael about the 80 plus percent return of capital and share buyback. And we feel, again, this mid-cycle on the 3-4%. So you asked me where the starting point was, we're thinking of that as a mid-cycle starting point. So I'm going to leave it up to you on when it starts and when it finishes over the five years and how you measure that.

But we feel comfortable and confident on the ranges that we've provided. On the 80% plus, are we going to buy back everything or we're going to run a - we just obviously had a new authorization and go forward, and we feel good about the liquidity that we have, the availability that we have. And I think that's where I would leave it.

**Michael Dell - Dell Technologies Inc. - CEO & Chairman**

Yeah. And look on the share count, I think there's a couple things you can expect to see. One is, Silver Lake started with 137 million shares. I think now they have 90 million shares, so they've already distributed a third of their shares. They've been very thoughtful and orderly in how they do that.

But 90 million shares are a lot of shares to be distributed over time. I've got quite a few more and you're likely to see those shares end up over time in charitable vehicles. And so don't be surprised to see transfers of shares into charitable entities so I can pursue some other good things to do in the world besides all this stuff.

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

Great. Okay. Thanks. All right. Just in the interest of staying with As here, I'm going to go to Asiya Merchant here on the second row, and then we'll spread out the alphabet here.

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

Great. Thank you, Asiya from City Research. Maybe you can talk about just share gains, Yvonne, Michael, maybe the whole leadership team here. You guys talk about growth rate. You guys obviously talk about expanding tam. If you could talk to us about, is this a rising tide that lifts all boats with all your competitors or are you actively going after gaining more share in your core and then the expanded TAM markets?

And then just a quick one on gross margins as well. You've talked about increasing gross margins in this expanding TAM opportunity. If you could dial it back a little bit, peel it back, is this on the CSG side? Is this on the ISG side? And what gives you confidence in that margin expansion if it's different versus your other mid-cycle periods? Thanks.
Let Sam and Arthur take the shared discussion.

Okay. Let me address the margin first. So from an ISG perspective, historically, we've been traveling at a 10-13% operating margin. You heard this morning that over the last six years we've increased at 330 basis points. So the new range for us is in 11-14. But let me unpack a little bit of that for you.

Number one, we are in the very early innings of AI. There are a lot of numbers out there. There are a lot of forecast out there, one of which is IDC, which pegs the market at $91 billion by 2025, a $124 billion by 2027. And we have an opportunity with AI as we talked about in the callbacks and in the city conference.

We have an opportunity to start expanding the AI margins. We do that through broader customer adoption. We do that through building out the solution set. We do that through pulling through unstructured storage. We do that through pulling through more of the consulting services we talk about.

But we have a maniacal focus, as you guys know, on profitable share gain. We talked about the fact that we are a structural share gain leader. We gained 10 points of share over the last 10 years in servers. We've gained 250 basis points in storage, and we've also expanded our operating margins 330 basis points.

The other thing to consider in the guidance is, while it's early innings and AI numbers are large and fluctuate, about 70% of what's in most of these forecasts is compute, and then 30% is the pull through of storage. So there is also a little bit of a headwind from a rate perspective where you'll see a shift in mix of server versus storage, which is a little bit of downward pressure on the rate. But again, with the growth, it'll be all accretive dollars. But with the mix shift of servers to storage, get a little bit of downward pressure on the rate itself.

And then I just add for a client solutions group, it's a bit of both on the question around growth. We see a TAM growth opportunity in the client solutions space. Think about the PC never being more important to the world as that productivity tool. So that's a good thing for the space we're operating in. We have an approach where we target the most attractive segments in that space.

And we deliver, with the team and the advantages Jeff and Michael talked about, we have been able to consistently gain share there, and we expect to continue to do that in the future. We've gone after most profitable segments too, which help us on the margin side, and that's where you see a differential margin versus our competitors. And we'd expect to sustain that and advance that as we go forward.

And Arthur talked to the 11-14% in ISG. And that, there may be some rate dilution as AI takes off, but margin dollar accretive. But we expect is that as we move forward and have more penetration around large enterprise, medium business, et cetera, that, that will improve, that margin rate will improve as well as more services and wraparound.

And then as Sam talked too, we're, we're thinking in the 5-7% op margin range for CSG. And we've seen, obviously most recently, we had 7.5 in the second quarter. But this is a long-term framework, and we will have quarters that are better. We'll have quarters that are at the lower end of the range, but we will always be better than our competitors.
Jeffrey W. Clarke - Dell Technologies Inc. - COO & Vice Chairman

Yeah. I think maybe to put a bow on this, the word structural share gainer is how we talk about our business inside the company. Michael and I talk about share of profit pools. That's more important than absolute share of every unit. Share of profit pools drives our business, which is why Sam's business focuses on commercial PCs, premium consumer gaming. Arthur's business looks at clearly the infrastructure stack around storage, around servers and services. And it's that combination that we really focus on driving the share performance of our company.

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

Great. Thanks, Asiya. Let's go over to Wamsi over here.

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

Thank you so much. Wamsi Mohan, Bank of America. I was wondering if you could double click a little bit on your new ISG outlook versus your prior ISG outlook. You clearly raised that higher. Can you bridge maybe from the old to new, what are the different components at work? Clearly generative AI, you've shown how excited you are about that, but is that all of it? Is part of it something else in that long-term framework in bridging from your prior to current guidance?

Arthur Lewis - Dell Technologies Inc. - President of Infrastructure Solutions Group

Yeah. Wamsi, thank you for the question. I think it's all of what you said. When you take a look at the overall TAM of $265 billion, that's growing 7%. And we're just using for purposes of this discussion, the IDC framework which has growing at 18%. So AI is growing faster than the average, so that's definitely a leader. It's driving compute and remember, it's driving accelerated compute, it's driving general purpose compute, and it's pulling through storage, especially the unstructured port of the portfolio to go after all those tokens that Jeff was talking about. That's going to be mostly all unstructured data.

So when we take a look at that, and we couple it with our strategy around pushing, we're a leader in purpose built to race, and we will continue to be a leader there. We're innovating and pushing hard into the software defined world with PowerFlex, PowerScale and ObjectScale. We're pushing hard into the edge with the Dell NativeEdge. We're pushing hard into the telco stack. We're pushing hard into multi-cloud, and we're extremely excited about Apex Navigator and the value that, that can bring to customers to truly optimize where workloads are run.

We look at all of that stuff and we say, "Hey, it makes sense to take our midpoint range from four to seven." So we nearly doubled the midpoint from previous guidance to this guidance, but our past performance where we're innovating how the technology market is evolving, made us think that this was a step in the right direction.

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

Go ahead.

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

If I could, Michael, it was great to see the elevated capital return now as you had mentioned prior. And I guess when we think about EPS growth, using that framework where you've obviously raised that a couple of points from six plus to eight plus, but you also alluded to productivity that is being driven through AI. So I'm curious if that's built into your model as well. What productivity gains could be there from that? And effectively, when you're talking about 20-30% productivity gains at customers that they're looking at, how is Dell using that internally? And would that be an incremental driver for you? Thank you.
Michael Dell - Dell Technologies Inc. - CEO & Chairman

Yeah. Well, we're certainly going after the opportunity. Yvonne touched on some of the levers in our cost structure. And look, I think if we look at our business, we have a structural competitive advantage in many areas of the business, and it's hard to know how many of those advances get normalized across a set of competitors. Obviously, we'll try to be first and capture those. So all that's reflected in the long-term outlook that we provided you.

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

Good. Let's go to Toni in the first row here.

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

Toni Sacconaghi from Bernstein. Thanks very much for coming to New York and doing this. I just wanted to push a little bit more on the margins. I think five years ago when you gave out segment margins, you thought the PC business would be five. It's done seven over the last three or four years. If you really believe it's 5-7, then implicitly you're saying CSG margins are going to go down 15% from seven to six going forward, and that's a big part of the business. So isn't that a negative margining point, or are you implicitly saying you actually believe seven is sustainable?

And then similarly, if I think about, on the ISG side, you've talked about AI margins being lower as a percentage, operating margins, and that sounds like it's the big incremental driver. So if your big incremental driver has lower margins, why don't we collectively see margin pressure across the portfolio? Because there seem to be potentially pretty big vectors in each business that might negatively impact operating margins. And believe it or not, I have a follow up. Thanks.

Arthur Lewis - Dell Technologies Inc. - President of Infrastructure Solutions Group

Do you want to go first, Sam?

Sam Burd - Dell Technologies Inc. - President of Client Solutions Group

Yeah. So in the CSG space, Toni, we are targeting the most profitable spaces in that business. We talked about a differentiated approach, which has allowed us to deliver better results. We see those results depend on a lot of factors. So you can look at economic cycles, you can look at speed of cost declines, you can look at competitive intensity and all that factored into what we see as that 5-7% range on operating margin.

Arthur Lewis - Dell Technologies Inc. - President of Infrastructure Solutions Group

Yeah. And Toni, on the ISG side, reiterate I think answer to one of the previous questions. Today, we talked about the fact that a lot of the 9680 servers are below the server average, and therefore is rate dilutive, but the dollars are absolutely accretive to the overall P&L. The 9680 is not going to be the only product we sell, but we have ways in which we're going to go improve the margin rate on the 9680, but we have other platforms by four, by two, by one configurations that we'll also sell.

We have broader solution sets. We have the pull through of storage, we have the consulting services that we're going to be adding to it. So you'll see an improvement in AI - we'll see an improvement in AI margins. But we're not only focused on improving the margins of the AI portfolio, we're maniacally focused on always extracting value for what we sell.

And the key to extracting value is innovation. And what I hope you took away from this morning is that we are innovating like no other in the spaces that matter most. And if you believe that, we should be able to extract value for that, and because of that, we've gained 330 basis points of margin.
expansion over the last six years, which gives us the confidence to up our guide or to have a guidance range of 11-14%, even though you will see a mix shift between server and storage.

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

And then if I could just separately follow up, maybe this is for Yvonne and Michael. You've acknowledged that you have excess cash on the balance sheet, about $10 billion in cash, and I think you need only four or five to operate the business. The capital return commitment today as a percentage of your ongoing cash flow generation, how do we think about the 10 billion on the balance sheet? Should we expect it to be at your normalized level within two years or three years? And how do you think about that in deployment in terms of cap return to shareholders, debt pay down acquisitions? Thank you.

Yvonne McGill - Dell Technologies Inc. - CFO

So Toni, you're spot on with the, we need a minimum, I would say, of four to five billion cash to run the business, but there's a cyclicality to our business. And so we will always keep more available than what the minimum would require. We have leaned into the to the return to shareholders and it's 80% plus. And so I think you'll see us following through with that over time. We talked about tuck-in IP accretive M&A, so don't expect anything significant there. But feel comfortable with the level of cash that we have on the balance sheet, and the ability for us to then return that to shareholders. I don't know, Michael?

Michael Dell - Dell Technologies Inc. - CEO & Chairman

Yeah. I would emphasize the plus and the 80%, and obviously there's some debt we can retire. There's lots of ways to use the capital effectively.

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

Okay, good. All right. Let's go - I'm going to try and move around a little bit. How about Dwight Blazin here? I see him with his hand up.

Dwight C. Blazin - Davis Selected Advisors - Research

Hi. Dwight Blazin, Davis Advisors. A quick clarification on the 10% growth rate of the dividend. Is that on a per share basis or absolute, because conceivably with share repurchase, the actual allocation of capital for the dividend could grow much more slowly. And then a question for both Arthur and, Sam if possible. Could you talk a little bit about potentially the expanding role of arm architecture in both client and server? Is that an increasing profit pool, or is it something that you could potentially more aggressively pursue in the future? Thanks.

Yvonne McGill - Dell Technologies Inc. - CFO

I'll start with the [inaudible].

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

You want to start with that one?

Yvonne McGill - Dell Technologies Inc. - CFO

Yeah. The dividend question.
Correct. Yep.

So the dividend expectation is on a per share basis.

For sure. But I think it's important to remember that there's also a plus after that. And it would be our intention. I think we've been very, very clear on our intention to return capital to shareholders. And so having the flexibility in that plus to adjust the dividend...

There's a lot of pluses on the slide.

I call it a minimum of 10 -

You have to pay attention to the -

... with the opportunity to do more.

So your point's well taken, Dwight, but I think you could expect us to be relatively consistent in returning that capital to shareholders over time.

Correct.

Lots of pluses on our side.
Jeffrey W. Clarke - Dell Technologies Inc. - COO & Vice Chairman

I'll take the ARM question.

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

Okay. Go ahead.

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

Our ARM provides more choice. Choice is good for customers. So whether we start at the PC and we look at ARM and what's likely to happen over the next handful of quarters, we have options, particularly for Sam's notebooks that really change the performance per watt of our products in the near term. X86 continues to improve long term in that area. And we ultimately have choice.

And then you add NPUs to ARM processors for PCs, you add NPUs to X86, and it's an exciting space. The same on Arthur's side on servers, ARM cores we see today, we've experimented with them for a decade plus. They're not meeting the performance criteria of the data center today, but it's promising new technology. Again, it's more on the performance per watt attributes.

And then if you project forward, there's new technologies, whether it's risk via other types of micro architectures that get pretty exciting for the infrastructure business. So we look at them all, we're engaged with everyone that you might imagine in that category of ARM processors and beyond. And as developers on the stage here, we're pretty excited about having increasingly more choice.

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

Great. Okay. Let's just continue to move it around here. I'll go to Aaron on the second row.

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

Yeah. Thank you for taking the questions. Aaron Rakers at Wells Fargo, and I appreciate the succinct presentations today. It was really well put together. I guess I want to tackle the AI discussion a little bit. I think last quarter you talked about a $2 billion order of flow for your, I think it was 9680 products.

I guess where I'm thinking about is how would you characterize the ability to fulfill that demand? What's the lead times look like? Is there more diversification coming in the GPU architecture or landscape? I'm just trying to understand when maybe you see that inflection show up into revenue because in addition to the pipeline, you talked about anywhere from 3-20x increase in the ASP.

And then my follow up question, just real quickly, that is, how would you characterize your views of competing against somebody like an Nvidia? You talked about a lot of those workloads residing on premise, but how would you characterize your positioning versus Nvidia's viewed a lot of these workloads reside in the cloud and fulfilled in enterprises via the cloud? Thank you.

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

I'll see a lot to untangle there. So first I think in our earnings call, I said lead times for our 9680 was 39 weeks. They're still 39 weeks. And supply continues to improve, and demand continues to outpace supply. That's where we are today. Our job is to find the supply. We're working with the supply, certainly in the growth range that Yvonne talked about for this period. We're trying to understand how that demand gets fulfilled.
Probably more interesting is, I think, the amount of competition that's coming into the accelerated computing space in the foreseeable future. And I think we've mentioned this before, but in an event that we haven't, we're tracking over 40 different accelerators today that are heading towards the marketplace, again, in the foreseeable future, and a wide array of technologies and architectures. Not all of them are 80 billion transistor devices, times eight for unbelievable performance. Many of them are optimized for specific AI workloads in smaller data sets.

So if I bridge that from the second part of your question, what we think happens, and we've talked about it in a variety of ways, but we think AI follows the data, which leads us to believe that AI gets decentralized, not centralized. It gets decentralized to where the data is created. And then it's further amplified by the fact that we think domain specific process specific, and fields of study models, mostly open source will be run increasingly where that data is created, which is decentralized.

And then over time, we think algorithm evolution is really what's going to be the game changer that algorithms will evolve to work on these smaller data sets. Then if you take algorithm evolution, decentralization of AI that follows the data, the computational intensity required to run a new algorithm on smaller data sets isn't what's the computational intensity required to train in a massive, large language model.

So we actually think that helps us. The data's already on premise, we establish. It gets to centralized, AI follows the data, the computational intensity over time, as the algorithms evolve, we think paint a good picture. And then we don't even talk about inference. And we think inference is at least an equally large opportunity as the training and tuning side and inference is clearly going to be run where the data is generated. Does that help?

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

Good. All right. Let's go to the fourth row in the center with Erik.

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

Hey, good morning, guys. Thank you for taking my question. Erik Woodring at Morgan Stanley. Arthur, maybe I want to double click on this AI opportunity, because a lot of feedback that I get from investors is questioning the longevity of the opportunity and maybe making comparisons to cloud servers and how those eventually got competed away to Asia.

And so maybe what I'm looking for is, can you help us understand why you will remain a player in this business for multiple years, not just one, two, three years, but multiple years? What are your key points of differentiation and how do you keep that competitive advantage going? Thanks.

Arthur Lewis - Dell Technologies Inc. - President of Infrastructure Solutions Group

Yeah. Thank you for the question. Incorporate by reference everything that Jeff just said in response to the previous question. But look, if you believe in the promise of generative AI, which I think most people do. And then you think about how generative AI is actually highlighting further the use of other artificial intelligence like machine learning, this is a new trend in the market, wait, a trend that's existed in the market that has now amplified because of what generative AI, the light that that has shown on the power of artificial intelligence.

This is a new way to process the vast amounts of data that are being created, especially of the unstructured variety. And then to Jeff's point and was in my talk track, a lot of the initial use cases are going to be targeting the type of data that typically would not be moved to the cloud that is going to stay on-prem, it's going to be proprietary IP data, it's going to be proprietary customer data, it's going to be proprietary financial data.

And then you further expand to, all right, there's going to be algorithmic innovation to really focus on, "Hey, do I need billions of parameters? " Probably not. It's going to be very use case specific. And there'll be innovation for much smaller models that, as Jeff said, are going to follow the data, but are going to track very specific use cases.

This notion that one large language model can serve multiple different purposes probably doesn't stay over the long term. You will see more model innovation very specific to use cases and data types. So it's a new way of how to think about infrastructure build out that's here for the long term.
How we stay competitive is how we always stay competitive. We innovate in this space. We started on the 9680 three years ago, joint engineering, the densest platform in the market, the best connectivity in the market, the most expansion slots in the market, the only product capable of housing XPU's in it. This architecture is not static, it's dynamic. It's going to shift to something else.

TDPs are going up, package sizes are increasing, connectivity is changing, and rack scale infrastructure will be what's in play. And so we will continue to innovate, and the pace of innovation is something that we have proven over time that we are significantly good at. So I think that Jeff -

Jeff Boudreau - Dell Technologies Inc. - Chief AI Officer

If I could add to that, just if you think of a modern AI stack, it really has three elements. One is the infrastructure layer, that's hardware, software, and OSes that's got a platform layer figure, all the tool chains that everybody talks about today. And then there's the application layer. Then you got to wrap that all in services in regards to our customers, and we're going to actually participate in each layer. So what Arthur just talked about was the infrastructure layer.

We're going to get in the platform where actually providing services and having opinionated stacks to help our customers and help ourselves actually drive a lot of these gen AI use cases to be more productive or provide a better experience. And then we're going to create that open ISV ecosystem, if you will, in regards to how applications can come in. I guess I believe we're one of the only that can actually bring that all together through our services.

And I think I was talking to Dave earlier, one of the biggest struggles I see with our customers is twofold. One it's about data and the other side's about the technology. Everybody's running to the technology, but they're really struggling with the data elements of this in regards to how do they identify the right data sources? How do they do the proper hygiene, how do they connect that? How do they build the models and the infrastructure? We play a role in all of that. And I think there's no one better than us in regards to the whole data prep phase. So that's a whole another wave of services and offers that we could bring that will drive more value, more margin.

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

Well, and again, I think since I can't help myself, you can't go buy that. You can't. You can't go over to wherever you want to buy a motherboard and go, "Hey, I got one of these AI things." Well, you have to build a system. You have to build an architecture. That architecture, we have to start contemplating memory bandwidth and memory capacity, unlike we've seen used before.

We have to think of interconnect and multiple interconnects. How we're going to build clusters of these servers and computational or accelerated computing assets tied to storage. The power and cooling around this. The system level design to build, whether that's out on the edge at an oil derrick or a deep mine or in a company's data center, wherever it might be deployed, is real systems engineering and architecture. And that just can't be bought. That's why we think we are in a very unique position that we can take advantage of the opportunities, particularly as this is rolled out in enterprises and everyday business.

Michael Dell - Dell Technologies Inc. - CEO & Chairman

Yeah. I can't help myself either. So it's complex and hence more valuable challenge for these enterprise customers to deploy this new system architecture that needs to be built. And as the leading and most trusted provider of those systems today to those enterprises, we think we're incredibly well positioned to lead that roll out of systems.

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

Just a little bit of passion on the stage here about that one. Riley, let's go to the fourth row on my left to Samik.
**Samik Chatterjee - JPMorgan Chase & Co, Research Division - Analyst**

Hi, Samik from JP Morgan. I actually one for CSG and one for ISG. For CSG, I think, Sam, you mentioned the refresh cycle you're expecting with AI adoption. Any thoughts on the key applications for the enterprise that drive that refresh cycle? And then on ongoing basis, as that filters through, does it really do anything to change the replacement refresh cycle on an ongoing basis for the CSG market?

Arthur, for ISG, curious the 6-8% growth that you're outlining, how you're breaking that between compute versus storage, because you did mention the 30% pull through storage, but also any thoughts on timing of when you start to see that pull through? Because seems like you're seeing the better pull through now on the compute side. When do we start to see the pull through on storage? Thank you.

**Sam Burd - Dell Technologies Inc. - President of Client Solutions Group**

Yeah. On CSG and the refresh cycle, a couple things that we think are beneficial in that space and that you see in the TAM growth that we talked about in the PC space and in our expectations. One of them is just the usage and role of the PC, never been more important. I see that on the agenda as we talk to CIOs, line of business leaders at companies, the tools they put in the hands of their end users.

It's really important in how you get talent, how you unleash that talent to do great things inside your business. So PC important on that agenda. We talked about innovation happening in that space. So you think about what Jeff described of AI capability built into the PC, it will be good in six months from now. It'll be better 12 months from now, better 24 months from now.

So that capability coming to the PC will help companies think about a tool that's really important, how I get the best thing in the hands of my users that help them be more productive and the cost of that PC and tool device, very low relative to the cost that I'm paying the people in my business to innovate and do great things. So all those things wrapped up in a TAM and an opportunity that we see growing in the client solution space.

**Arthur Lewis - Dell Technologies Inc. - President of Infrastructure Solutions Group**

Yeah. On the ISG side, I just reiterate. We took our midpoint guidance from four to seven, nearly double, right? And we did that because we looked at the areas where we're innovating, we looked at the technologies that matter to customers. We took a look at our track record, and we felt that, we were pretty comfortable in upping the guidance, the midpoint guidance from four to seven.

I think if you break it down and look at the texture of that, you have an AI market that's most likely going to grow faster than the average, and within that 60 to 70% of that is compute, 30 to 40% that is going to be the storage pull through. So there will be a mix shift between server and storage, which would then of course imply that there's probably more growth in server than storage.

But we're planning for both of them to grow. We're planning for a profitable share gain across the portfolio. Two years from now, I hope to be here talking about similar share gains that we've seen over the last 10 years since the EMC acquisition, again, over the next couple of years.

And in terms of when, look, the 6-8 is a long term framework. We don't put a timeline or a date specific on it. We're just saying that based on the technology trends, based on the innovation over the long term, we would anticipate a cumulative average growth rate of between 6-8%. And as Yvonne said, sometimes our business is cyclical, so sometimes we'll do better than that. Sometimes we'll be at the low end of the guide, but over the long term, we feel really good about 7% at the midpoint. Yvonne said.

**Yvonne McGill - Dell Technologies Inc. - CFO**

Yeah. That's great.

**Robert L. Williams - Dell Technologies Inc. - SVP of Investor Relations**
And regardless of where we are in that cycle, we'll optimize the model to generate cash flow and generate the best outcome possible, for sure. Let's go to the middle here with, Mike.

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

Hey, good morning. Mike Ng from Goldman Sachs. Thank you for the question. I just had one on AI within ISG. I was really struck by the comment that 50% of accelerated compute will eventually end up on-prem or at the edge. And I was just wondering if you could talk a little bit about what the world looks like when we get to that stage. Whether that's from a training versus inference perspective, CSP versus enterprise perspective. Any color there would be great.

**Arthur Lewis - Dell Technologies Inc. - President of Infrastructure Solutions Group**

Sure. So like I said, right now there's a lot of the tier two cloud service providers. We're really focused on building out large scale training infrastructure. And over time, we'd expect to see a stronger balance of training and inferencing. And in fact, over a period of time you would expect inferencing to be actually a larger opportunity than even the training opportunity.

And when we talk about this algorithmic innovation, it's really probably more specifically for the enterprise to go drive efficiency and scale. So you're not having one large language model try to serve several different use cases. You're going to have medium language models, small language models that are going to be very domain specific, very use case specific. And that's where we see the innovation evolving.

And so you see this heterogeneous world of accelerated and general purpose compute optimized for AI. And I think that's an incredibly important point that Jeff was making, because there will be applications that need the massive parallel processing that is in a graphics processing unit, but there'll be a lot of other instruction sets that can run very nicely on a host CPU. So as we see this build out, we would expect inferencing to grow a little bit larger than training. We would expect a heterogeneous world of both accelerated and general purpose compute, and we would expect to see many, many more use cases around artificial intelligence.

Another point I want to make is, everybody's really wrapped around the actual on generative AI and rightfully so because of the impact that it has. But what's also happening is that generative AI is shining a light on all other AI use cases, including machine learning. So when we talk about things like standardizing and automating workflows, tool chains, processes, when we talk about redefining data storage, redefining data pipelines, breaking down data silos, thinking about end-to-end security, intrinsic and zero trust, this does not apply only to generative AI.

Generative is a catalyst for customers to think about what does a modern data center look like. And as we said, we think that there's architectural silos that will be dismantled. Its operations will be simplified, and customers will opt for more software-defined, flexible, secure, dense architectures to be able to leverage all things artificial intelligence, not just generative AI to run their businesses to serve customers in new, unique and different ways.

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

Great. Let's go to the second row to take a pick, Ben or Lou. We'll go to the next person after that.

**Ben Reitzes - Melius Research - Managing Director**

Me first, Lou. Nice to be here guys. Thanks. It's Ben Reitzes, Melius Research. With regard to the PC market, can you talk a little bit more about how AI is going to drive the upgrade cycle? What apps specifically are customers excited about, are you excited about that'll drive the upgrade cycle? And then I just had a follow up on servers, if you don't mind.

**Sam Burd - Dell Technologies Inc. - President of Client Solutions Group**
Sure. We see a lot of apps across the PC. So you can look at things that Microsoft’s talked about around copilot and Windows. Obviously, Office is a key productivity app inside PCs. You can imagine waves of innovation with apps, some of the workstation apps that we see today and being able to do things on the cloud plus a world where those things are done on device on the PC.

Arthur talked about the edge in the last question. You think about those same things on the device of neural processors, accelerators that are going to add capability to innovation that we’re going to see in apps that we use every day on the PC for mainstream office knowledge worker use to people doing design and innovation in the enterprise.

So you put all that together and you think about other requirements on the PC of processor or memory to run those models. That’s where we look and see an attractive world for a PC being a more capable device to allow that intelligence on the device in the future.

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

Yeah. Maybe to add to that, think about the modern application environment of PCs. All of those are going to get an assistant to some form. All of those are going to want to take advantage of some form accelerated computing. Then it’s going to get down to an economic question, is that going to be done in the cloud and cloud economics? Are you going to take advantage of the horsepower under the hood of a PC?

And you’re going to find that because of latency and economic reasons, the capability of the NPUs and GPUs that are already in PCs are going to be the place to run those assistance and those accelerators locally. We think that’s what happens across a broad set of applications on the PC side. Again, AI following the data.

Michael Dell - Dell Technologies Inc. - CEO & Chairman

Yeah. I think Microsoft did a good job explaining how copilot is going to help office productivity, but you can think about it as anywhere where there’s an edit prompt, AI is going to help the user come up with a more successful answer, whether that’s in an Adobe application or Autodesk application, or whatever it is they’re doing, in whatever industry.

Jeff Boudreau - Dell Technologies Inc. - Chief AI Officer

In all the things Michael just referenced, those use cases don’t all need a GPU as an example. And that goes back to the silicon diversity we started with a while ago, which is we’re working across all the major players in the industry, but in addition, there’s 30 to 40 startups and they’re actually making investments all the way from a mobile device in silicon all the way up to the core data center. So you can see innovation all the way through the stack. That’ll help.

Ben Reitzes - Melius Research - Managing Director

And I just wanted to clarify a few - double click on one of the questions around servers and the edge is, and you’ve said AI’s going to follow the data. You just mind clarifying like what the catalyst for servers on the edge is, are you saying AI is going to create a surge of collecting data on the edge and you’re in the perfect place to capture that and it’s going to help drive that 50% number that you talked about, or how are you seeing it? Because I think investors just have a tough time visualizing the edge opportunity for the servers. So trying to clarify.

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

Why don’t I take a quick swing at that then you can take it home. The world is digitizing. Our world is now made up of tons of sensors, tons of smart machines that are creating data. This data's actually streamed, it's unstructured. That unstructured data to get real time results has to be processed. Computation has to be done locally to where the information is being created. You can't afford the latency.
That means we're going to treat hot data, the data that's coming right out of the machines, and we're going to do some level of computation. It will be inference based on a model that's been trained. That train model will run locally on a server. Maybe it's a big PC, a workstation, all good stuff for us. Computation, streaming data coming from, we believe are our unstructured assets, allow us to think about that.

Again, oil mine or actually oil derrick, a deep mine, a smart factory, a smart hospital, a smart city. All of that is amazing amounts of unstructured data coming that needs to be processed locally, that will be done likely on maybe a different type of server than we're building today, different environmental characteristics that we build today or build today for other applications happening in the future. That's where this goes.

Michael Dell - Dell Technologies Inc. - CEO & Chairman

And we've had customers, if you take just the retail vertical as one example, for years where they've been putting more intelligence in the stores and now with AI. So if you think about any big box retailer, take me to your servers, there's at minimum, a data closet or a rack in every single one of those stores.

And they're increasingly becoming intelligent. They're monitoring traffic flows, they're dealing with theft protection, cold chain management, merchandising optimization, any KPI that makes the store more successful is being managed with technology instrumented in the store. And the same happens in advanced manufacturing in every sector. And edge is a real significant opportunity.

Arthur Lewis - Dell Technologies Inc. - President of Infrastructure Solutions Group

Yeah. And just to put a fine point on it, why does it matter? When we talk about infrastructure, infrastructure management, application orchestration, all done in a zero touch, zero - We're talking about having it out in the real world where IT professionals do not exist.

What we are doing is we're basically putting it in a box and enabling customers to deploy it in manufacturing sites, at retail locations to support digital cities, to support energy companies, to support financial services. Anything where you see a remote operation, typically doesn't have an IT department. So they need something, zero touch, zero trust that can be deployed in many, many different locations.

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

Go to, Lou here.

Louis Miscioscia - Daiwa Capital Markets America - Executive Director

Okay. Thank you. Lou Miscioscia, Daiwa Capital Markets America. So you all partner with a lot of systems integrators but you've talked about you want to expand out your consulting and professional services. So can you share with me how material is now, how much you expect it to grow? And if is there a conflict of interest, and do you need an acquisition to really boost it up?

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

Well, there's enough work for a lot of people. And what we're trying to build is an ecosystem around AI of roles that need to be filled. Jeff talked about one, Arthur talked about one earlier on stage, is the role of data preparation. We need to build some services around that to help our customers, but we're going to have a partner network because our reach will be limited.

There's plenty of room for us to work with our GSIs today and into the future to help us bring AI to the enterprise at scale. I don't think if it's one or another, I think it's us continuing to build our close to the box services, the professional services that can help us consult the work that Arthur and team have done around Project Helix, as an example of extending our ability to help customers.
But if you think about helping customers find their data, prepare the data, get the data ready to be trained in a model selection, we will not do all of that work. We will need a network of partners. We're building that today. I'm really optimistic about our opportunity to work with the SIs going forward.

**Michael Dell - Dell Technologies Inc. - CEO & Chairman**

Yeah. The SIs are highly complementary to us, and we don't do a lot of the things that they do. And because we have a leading position in all areas of infrastructure, we have a first class partnership with all the leading SIs. And it also goes down to the VARs and the resellers that deal with the mid-market companies. Sure, there are things that we're going to do, but generally those are foundational level activities and they're adding value on top of those.

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

All right. Let's go on the back here. I can't quite see who that is. Just take a picture.

**Timothy Patrick Long - Barclays Bank PLC, Research Division - MD and Senior Technology Hardware & Networking Analyst**

Thank you. It's Tim Long at Barclays here. Two if I could, first maybe for Arthur, I just wanted to dig into storage a little bit in AI. You talked about unstructured, but can you just talk a little bit more about the transformation we'll see there on the technology side, more flash, more high-end. What dynamics will be different in these AI data centers and how will that impact you.

And then second, maybe for Michael and Jeff, curious on Apex and as a service. A lot of companies are doing this, I think you guys are on that path. Curious our customers' up for that, sometimes they're not. And related to Michael, something you said before, this stuff is very complicated, so as we get into this more complicated world, is that something that you think will inflect as you guys can really take the next step in building that recurring as a service theme based on complexity around AI? Thank you.

**Arthur Lewis - Dell Technologies Inc. - President of Infrastructure Solutions Group**

Yeah. I think - You want to start?

**Michael Dell - Dell Technologies Inc. - CEO & Chairman**

No, go ahead. Go ahead.

**Arthur Lewis - Dell Technologies Inc. - President of Infrastructure Solutions Group**

Sorry. I think to start, let's fundamentally agree that the explosion of data, the data that screen created of the world is actually good for all things storage. We have a rich history of referring to block as primary storage. Over time, it's very likely that file and block, the unstructured portfolio, starts to become more primary storage.

So that's why we're saying there's going to be a huge pull through. The amount of data that's being created, specifically targeted to the unstructured world, is really what's going to be driving growth, which is why we're super excited about the work that we're doing with PowerScale, the work that we're doing with ObjectScale.

This is also really relevant, and we really haven't talked about it much to data protection. More data around the world means there's more data to be backed up, there's more data to be archived, there's more data to be vaulted. So when you think about our strategy and you think about what we're doing in primary storage, the push into software defined, what we're doing in data protection with our target, our PPDM software, our scale up.
appliance, when you think about what we're doing with multi-cloud, we really like the innovation and the focused innovation on the things that are going to matter most to technology.

But to net out the answer to your question is, a lot of that AI is going to the unstructured portion, is what's demanding AI to process it. And so that's where we see the major pull through on storage from an AI perspective. But obviously the growth of data overall has massive benefits across the entirety of the portfolio.

**Jeff Boudreau - Dell Technologies Inc. - Chief AI Officer**

Yeah. And the only thing I'll add to that is going back to the architecture question, I would say that you're going to see a shift more and more to software defined. So that's where PowerFlex, ObjectScale and PowerScale all fit well into that, and they're all scale architecture. So in regards to what you need to do for portfolios and scale to run this data sets is going to be critical. And that's something our customers need and desire.

**Arthur Lewis - Dell Technologies Inc. - President of Infrastructure Solutions Group**

And I think that's a great point to reemphasize, Jeff. We talked about what does a modern data center look like? It is going to be software defined, it is going to be dense, it is going to be flexible, and it will absolutely be scaled out because of the rapid growth of data. Customers will absolutely need that flexibility. They will need that scale out capability.

**Michael Dell - Dell Technologies Inc. - CEO & Chairman**

And look, I think that there's a trend towards appliances and more solutions and customers recognizing that there's a value line in their business where things below that line, are not differentiating. So to the extent they can buy those and consume those, there's more interest in OPEX and consumption solutions, hence Apex. And we haven't talked a lot about this over the course of the last couple hours, but we do have a large remaining performance obligation, a deferred revenue that keeps growing as we build those capabilities.

And again, over time, as we move more towards outcome-based approach for customers, that is more valuable and it's a larger TAM. And yeah, I do think we're already seeing customers, whether it's in zero trust or in AI solutions, looking for more of the appliance type solution so they can go faster.

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

Great. Riley, let's go to the second row. Woo Jin.

**Woo Jin Ho - Bloomberg Intelligence - Senior Technology Analyst**

Thanks for taking my question and thank you for the event. Quick question on the CSG 2-3% CAGR, it's unchanged from the last investor day, whereas ISG is growing at a 6-8% rate, and you raise it principally because of AI. You've talked about feature rich PCs. We're at a unit bottom in terms of PCs today. I'm assuming that there should be some ASP lift as well as a unit volume lift. Why wouldn't the CSG growth rate be faster than the TAM?

**Sam Burd - Dell Technologies Inc. - President of Client Solutions Group**

We do have a faster growth than what we see in the TAM. And I take it in spirit at which we talked about it, it's a long-term framework for revenue growth that we expect. So we anticipate TAM to increase, we do expect to gain share. We're going after the most attractive segments in the
industry. And when you put all that together, that's where we see a growth rate over the long term that will be quicker than what we see TAM growing in the PC space. I don't know if you'd add anything that, Yvonne?

Yvonne McGill - Dell Technologies Inc. - CFO

No, I think you hit it well.

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

Okay. Good. Let's see. Evan got it. David, we'll come to you next.

Ivan Feinseth - Tigress Financial Partners - Director of Research

Ivan Feinseth, Tigress Financial Partners. Thank you for the event and taking my questions. Can you go into some detail about your R&D strategy and focus and budget and also your M&A strategy and what your crossover to buy versus build and also a lot of the capabilities and connectivity. There's going to be software defined driven, can go into some of your thoughts on that. And then one last thing on the peripheral side, let's say content creation and even VR and AR peripherals. [inaudible].

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

That is four or five questions. Let me see if I can work my way through this.

Ivan Feinseth - Tigress Financial Partners - Director of Research

Thank you.

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

Our R&D strategy clearly was represented in terms of the two core businesses that you saw today. Fast portfolios, number one positions in a number of spaces. We will continue the R&D required to be leaders in our traditional spaces. It's a very large market opportunity for us. And while we're proud of the share performance that you've seen over the past decade, there's still a lot of share to acquire in time and we're going to build up the portfolio to do so.

We've also signaled, I think, in a couple of these, and it was referenced on Michael and my charts, I believe, the areas that we're continuing to extend. We really believe in this notion that our model is very unique and allows us to differentiate our entry in the particular area around the radio access network. The RAN converting to O-RAN, disaggregating, that disaggregation of the RAN building in components of industry standard building blocks with our software defined architecture allows us great room to grow with the extension.

Arthur will correct me, but I think our XR5610 and 8,000 purpose-built telco platforms from our servers with all of the needs of telco to extend in this very large adjacent marketplace. We talked about edge in a variety of ways today. Data being created at the edge, AI at the edge, helping customers solve in the wild, if you will, or IT in the wild of helping them deploy gear in these very remote places.

The edge opportunity, many of you have written about this is a $100 billion plus opportunity, natural extension of our platforms, our software, our management, and making it easy for customers to deploy. We talked about AI at ad nauseam today. We believe that's a natural extension. So the R&D is following where we believe those opportunities. We are becoming incredibly more efficient in our core businesses, which allow us to continue or to extend our investment into these new areas. We will continue to do that.
Software based. I don’t know how many times we mentioned software today, the vast majority of Arthur and Sam’s resources are software engineers in our company. The vast overwhelming majority are software engineers creating more value on top of our core hardware, increasingly packaging that software and that hardware into more integrated appliances.

And then now, with some of the work Jeff’s doing is using AI to actually bring in some of our telemetry data from services to extend our service offerings, to do things like perhaps, auto detect a failure and fix it before it happens, or thinking about how we rebuild and build a more tightly integrated serviceable option and solution for our customers. We will continue down that path. And then on CSG, I think was the last of your questions about future peripherals.

Sam talked about this; hybrid is here to stay. We believe the hybrid environment increases the peripheral estate for us. So we look at that peripheral estate moving from the strong point of the visual display and the dock for the interconnect to now do mouse, keyboard, camera, audio. The integration of building a high performance hybrid work environment for our commercial customers and high-end consumer customers, we think is a target rich environment for us. And to put the cap on the very last part of your question, Sam does produce AR and VR solutions today for gaming and for our commercial PCs and workstation marketplaces. I think I got them all.
Thanks. Sidney with Deutsche Bank. Thanks for doing the presentation. So building on a prior question, clearly a big part of the AI TAM growth is coming from services. How much of that services TAM are you able to address as you look out the next few years versus opportunities for VARs and system integrators?

And then the next question I have is, it’s probably a little early to talk about future technologies, but like quantum computing and a few things that you listed. How should we think about the timing of these technologies and which ones are you most excited about?

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

Services, AI, big environment or big opportunity, I should say. Look we’re continuing to build out capabilities. We made a set of announcements right before the last earnings about extending from Project Helix and continuing to build out capability. We will continue to do that.

As far as how much is directly addressable to us, I think Michael said it quite well, we’ll be very complimentary with the SIs. There’s things that we will do that we believe are natural extensions from our place of building the right sized infrastructure, helping customers prepare their data. That’s an important attribute. We think we can add value given that we store more people’s information than anyone else on the planet. We think that’s a good place to work from.

We think the ability to help them pick models for that data is a role that we can help, we won’t do all of that by any stretch of the imagination. So I think that provides us a much greater service footprint than we have today. I don’t know what percentage of that converts or how that converts to a percentage of the market opportunity. But we’re excited about the services, and they get just tightly integrated to what we do. And I can’t remember what the second part of the question.

Sidney Ho - Deutsche Bank AG, Research Division - Director & Senior Analyst

I think that was it.

Jeff Boudreau - Dell Technologies Inc. - Chief AI Officer

Okay. Oh, quantum and other things.

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

Oh yeah, we like that. We like things that are computational intent and require lots of data. It’s our day jobs. It’s the exciting dreaming part of our job of what’s coming next. All of those bring promising opportunities of growth and change in our industry. But you think about the computational intensity around quantum or the ability - Oh, let me get this. So we’re going to run two models of the same thing. That sounds like two data sets. That sounds like two computers. We like that.

And we think that is going to be the way that some of these advanced engineering models will be developed in how you model, whether it be jet engine performance or how you model a genomic sequence or what it might be. There’s going to be a lot of opportunity in those new areas. They’re a little further out than the real opportunity in front of us of AI, but they continue this notion around accelerated computing and the use of data.

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

Yep. Good. All right. Get to, David.

David Vogt - UBS Investment Bank, Research Division - Analyst
Great. David Vogt, UBS. So two questions, one on ISG and storage and then one back to Yvonne. You talked about scale out software-defined storage as being critical for unstructured data going forward. Does that mix in your business open up new targeted customers that you might not have been able to target in the past aggressively, or conversely, does it open up the door competitively for potentially new entrants that are software defined native that are smaller, a little bit more nimble?

And then for Yvonne, I know this is a long term model. Should we think about margins collectively as, we might mix down in ISG because of the AI profit rate consideration, but as it grows faster than CSG over the long term model effectively, consolidated segment margins are effectively flattish to where we are today?

Arthur Lewis - Dell Technologies Inc. - President of Infrastructure Solutions Group

Yeah. So I'll start and Jeff can chime in. Because I think you're using software defined in its literal sense. In other words, storage software that can be deployed on any X86 architecture. What we actually see is the point Michael was making a couple of questions ago, where customers really want software defined like capabilities, which mean it's agile, it's running through a CICD process. You're getting feature releases out periodically versus every couple of years, and it comes with full lifecycle management.

Customers don't necessarily want storage software on any X86, where then they got to go branch a bunch of storage updates separately from their server updates. And they're behind on their security patching, which makes the storage software run slower than it otherwise would. So when we talk about software defined, we're talking about modern storage software that can be delivered in two tier, three tier architecture, but is really running through an Agile CICD basis. So the barrier to entry in that model is a lot higher than if you were a pure software player.

Remind me the second part of the question. Oh, yeah. And so clearly unstructured, we think is going to be growing a lot faster than primary storage. And given the number one positions we have, given the deep relationships we have in enterprise, it puts us in pull position to win these workloads as they come on board.

And we have, let's call it 30% share in each of server in storage worldwide. So there's still 70% of the market that's available to us. That's why we have a $260 billion TAM. That's why we have ample room for growth. So innovating in these spaces allow us to be a profitable structural share gainer going after the technology trends that matter most to customers. A lot of it is going to be driven by AI, which means there's going to be a huge unstructured pull through, which creates opportunities for PowerScale and ObjectScale.

Jeff Boudreau - Dell Technologies Inc. - Chief AI Officer

Only thing I would add is the software fund, the critical component to Arthur's point is it can be deployed as a purpose built thing, is a two tier, it could be a three tier, I think HCI to appliance with full lifecycle management and also could be a cloud endpoint. So pick your cloud of choice in having it there. You provide simplicity in IT operational consistency for those users and those customers across that spectrum.

And both with PowerScale and PowerFlex. So for block or file that software defined attribute actually can work for high performance computing. So if you think of like parallel file systems and some of the new workloads that Jeff was hitting on before, those things have performance and scale no one can deal with.

Yvonne McGill - Dell Technologies Inc. - CFO

And then in regards to the operating margins, we talked about 5-7% in CSG and then 11-14% in ISG. We talked about some of the pressures that we're going to see in the short term, maybe on the rate, but feel like our software content, our services content, as we wrap around, there's upside from there. We already know we're running faster than that. He just doesn't want me to change his quota on CSG. But again, we're going to perform better than our competition and we remain committed to that.

Robert L. Williams - Dell Technologies Inc. - SVP of Investor Relations
Okay, I think we've got time for one more question back over here and then we'll do a wrap up.

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

Yeah. Hi, it's Krish Sankar from TD Cowen. I had two of them, one on CSG, one on ISG. First and foremost, thanks for the presentation and insights. On the CSG side with gen AI, et cetera, are your commercial customers raising the specs required, like more processors, more DRAM, whatever it might be to future proof? If so, what is the margin implications?

The second one on ISG is, if I look at it over the last five years or post EMC, one of the things that Dell did in greening share was consolidate the product portfolio in ISG, which made it easier for customers to identify. Now, as you go into AI, how to think about the product portfolio expansion and how do you plant attack it given that it's a little bit going the opposite direction than what you did in the last five to six years? Thank you.

Sam Burd - Dell Technologies Inc. - President of Client Solutions Group

Yeah. So in CSG, I see a couple waves we've seen of devices people are looking for. So I actually track your question back to pre-COVID and getting into the pandemic era. We saw with the applications people were running higher specs, higher configurations of PC to provide the power and capability that end users needed to work remotely.

And we see that same thing playing out that I talked about in an AI world, whether that's accelerators, NPUs, you can think about more memory on systems to run those models. We see those as good things driving that differential ASP gap that we talked about versus our competitors and seeing that continue into the future world as the system becomes more important, and we add AI capability.

That helps our margins. We talked about targeting most profitable segments, adding machines that really have a productivity ROI to customers, and we think they'll have higher ASPs, it'll help us win in those segments that are differentiated. That all translates over into the guidance that we gave around operating margins that Yvonne talked about. And we think that helps us continue to have an advantage versus our competitors in our performance.

Arthur Lewis - Dell Technologies Inc. - President of Infrastructure Solutions Group

Yeah. And on the ISG side, you're right, several years ago there was a vast simplification of the portfolio. And look, we will always fine tune the portfolio, but at the end of the day, we exist to solve customer problems. And we look at technology trends, we have a really deep understanding of what customers are going through. And so we will continue to evolve the portfolio consistent with what we talked about this morning, which is always wrapped around, how are customers thinking about the future of what their needs are.

And so from an ISG perspective, clearly the innovation in multi-cloud is going to be incredibly important. These multiple workloads will be hybrid, and we need to make sure that we're providing common management, operational consistency both on-prem and in the cloud.

And then when you think about CSL, which is this common storage substrate layer, this is an incredibly important component of our strategy. Because when you think about some of our competitors, who's a leader in file, block, object and data protection, that can actually connect across all things then layer on AIOps, FinOps on top of that to really allow customers to optimize where their workloads are being run.

So these are all going to be extremely important components of our strategy going forward. And so I wouldn't expect to see like another major simplification, but there will always be fine tuning. But the strategic priorities are essentially what we covered today and hopefully that made sense.

Robert L. Williams - Dell Technologies Inc. - SVP of Investor Relations
Okay. Thanks, Krish. Thanks to everyone. I know we didn't get to every question. We're going to hold a management reception immediately following the formal presentation. It'll be out in the lounge area, which is directly across from the elevators. We'll be there for about 30 or 45 minutes with the heavier [inaudible] light lunch type of approach. And with that, I'll turn it to Michael to close things up.

Michael Dell - Dell Technologies Inc. - CEO & Chairman

Great. Well, thank you all very much for being with us today. Look, technology is everywhere, and Dell is thriving. The amount of data in the world continues to grow at a tremendous rate. And as that happens, the opportunity for Dell Technologies continues to expand. And we've proven over the decades through wave after wave of innovation that we can translate that into cash flow and earnings and continue to capture opportunities and grow our TAM.

We have the right strategy backed by unique operating advantages. We're committed to driving long-term value and growing our total capital return.

And I've been at this for 40 years, a very experienced team with me and many, many more around the world. And I've never been more excited about the opportunities that we have ahead to deliver incredible capabilities for our customers to help drive human progress. And so thanks so much for joining us. Look forward to the discussions in the lounge, and it's been our pleasure to share our perspective and the powerful opportunities that we have. Thank you.