**Patrick Moorhead:** Hi, this is Pat Moorhead, and we are back for another day of The Six Five Summit, day two. We hoped you enjoyed day one. If this is your first time here, go back and look at all those videos from day one. But maybe you should stay for this one.

Daniel, great to see you, man. Here we are, another Six Five Summit, another day. We made it through day one.

**Daniel Newman:** We did. It was a great start. And really great to hear from Hock Tan, who kicked off the event. But day two is going to be another really exciting day, Patrick. And like you said, there's so much content here, but the way we've set this up is that people can get it when they want it.

**Patrick Moorhead:** Exactly.

**Daniel Newman:** It's on demand. But of course, all you that are watching live, thanks for tuning in.

**Patrick Moorhead:** That's right. We've had so many incredible topics so far this week, and yeah, maybe I have some personal favorites when it comes down to the multi-cloud. But infrastructure is hot, infrastructure makes all of the consumer applications and B2B SaaS applications go around. And we just happen to have Kirk with us from Lenovo. Who happens to run ISG for Lenovo. Kirk, how you doing?

**Kirk Skaugen:** Doing well, thanks for having me.

**Patrick Moorhead:** Yeah, it's been so much fun chronicling your growth here at Lenovo. And I think what makes it even more fun is I knew you at your previous two jobs, as well. And it's been really great to get to know you and see you and get to know your team. And quite frankly, the growth has been impressive and I'm so glad you can share bits of wisdom, talk about where you're headed and the market is headed. So thank you so much.

**Kirk Skaugen:** Yeah, thank you.

**Daniel Newman:** It's great to have a new alumnus to our day opening. And so with that, Kirk, this year was all about navigating what the market had expected to be rough waters. So our theme of the show after multiple years of wild, crazy innovation and growth, frothy markets, ZIRP, zero interest, massive investments, stock prices with multiples that nobody could ever possibly understand. We saw a rebalance.

Now ironically, we're midway into this year of 2023, and here we go again. New bubble AI, we'll talk about that with you here in a little bit. But I want to set the stage a little bit about the macro, the overall perspective. You, as a company, I've diversified very much, PCs to systems, to infrastructure, to services. You're watching, and each part of the business has been affected a little bit differently. Give us the overall perspective that you have as one of the top leaders at Lenovo, of the overall market. And then talk a little bit of course about your business and how it's holding up, given all the complexities that we're seeing in 2023.

| Kirk Skaugen: | Yeah. Well, thanks. Certainly the pandemic was significant for us. We grew $10 billion- |
|---|---|
| Daniel Newman: | Good business wise. |
| Kirk Skaugen: | Yeah, yeah, yeah. No, I think $10 billion of growth for two consecutive years in a row, which was challenging for us all and really tested all of our supply chain acumen. The last year was great for infrastructure. We just got done with our fiscal year-end at the end of March and grew 37% year-on-year. PCs are still digesting from an inventory perspective, but we're confident it'll get back to growth in the second half of this year, as people consume their inventory. But we look at the activation data on that side and know that it's much better than the actual the sell-in into our channel, so we're confident of that. |
| | And then as we've got a diversified growth engine, now 40% of our business is actually non PC. So the phone business from Motorola, we're hoping to be the third largest phone company outside of China. And then the infrastructure growth, the fourth quarter we do 56%, so we can talk about that. But Lenovo overall, we're trying to diversify into a solutions and services company, taking advantage of the supply chain we have, but building into more of a end-to-end solutions provider. |
| Patrick Moorhead: | Yeah, it has been incredible to watch. And I had a relationship with Lenovo previously named Legend back when I worked for a chip company. And it really started off as a PC company. No apologies, did super well. Buying up the IBM server business and then the Motorola smartphone business. And there were a couple years where it's like, wow, this is kind of challenging here. Companies credit, growth in smartphones, like you said, number three outside of China coming up and infrastructure. I mean, it really is. I mean, the tens of billions of dollars growth engine there in a market that isn't going up into the right from a market growth. So you're obviously taking share. Taking share in servers, taking share in storage. |
| | Some of this market growth ... and it's funny, sometimes we talk about data being this new thing. I mean, when I started my career over 30 years ago, we were talking about data. It was smaller data, it was harder to manipulate inside of big monolithic databases. But it was there and people are trying to take advantage of it. Here we are, over 30 years later or maybe 2% of that data is being acted upon. Whether it's analytics, whether it's AI, machine learning, generative AI- |
| Daniel Newman: | Still. |
| Patrick Moorhead: | 2%. What is Lenovo play in this, essentially the 98% of business that we're not ... the amount of data that we're not doing anything with. |
| Kirk Skaugen: | Yeah, so I think in many ways we're very early in the stages of infrastructure because the data we're looking at, the amount of data in the world will double actually in the next three years. Whereas as you said, we're only computing 2% of that data today. So when we're looking at this AI phenomenon, we're looking at it, number one is the world's largest supercomputer company. |

More of that driving to AI for things like cancer research and weather prediction and these kind of things.

**Patrick Moorhead:** Congratulations in picking up a few more incremental spots this year on the top 500.

**Kirk Skaugen:** Yeah, thank you. And it's something we've definitely focused on over the last several years. So we think about AI from a super competing perspective. We think about it from a digital twins perspective. We're building, as Jensen said in the GTC keynote, one of the largest OVX clouds in the world along with Microsoft and Vidian, as we see manufacturing being revolutionized with digital twin infrastructure.

And then from an Edge perspective, we created a new Edge division two years ago where we have now this think Edge portfolio. We're moving AI to where the data is, versus data going to where the AI is. So 75% of that data we think will be computed at the Edge. And that business for us is growing over 170% year-on-year right now, as we move that compute to the Edge.

**Daniel Newman:** So you can't really talk about the data and AI without talking about the probably most prolific and expedient trend that I've seen in my career. Now my career is not as old as yours.

**Patrick Moorhead:** Thanks, buddy.

**Daniel Newman:** Yeah, I just want to call that out.

**Patrick Moorhead:** Thank you. But I bet it's called wisdom.

**Daniel Newman:** I'm multiple decades in now, and I've never seen anything, Kirk, proliferate as quick as generative AI. So we've been talking about AI for a while. We talked about AI because we've been on the big data trend, we've been on the analytics, we've been on the ML, we all got this, but this was coming. But the inflection has been wild. I mean, back I think I was asking a friend just the other day, I said, back in October of last year, had you ever heard of generative AI? And just the average person, it's like, no. So within six months, basically in six months you went from nobody had ever heard of it, to it is the biggest thing on every news channel, every TV program.

And so I have to imagine a company like Lenovo is looking at this and saying, it's going to reshape our business. It might reshape everything from how you design a PC to how you're going to supply infrastructure to hyperscalers, to how you build the next supercomputers. Talk a little bit about, first of all, your perceptions of the trend. And then second of all, I would just kind of like to understand how does Lenovo, at least at this early stage, foresee generative AI being part of its growth?

**Kirk Skaugen:** Yeah. Well, I think one of our benefits is we say we're pocket to cloud or Edge to cloud because we have the phone and the PC business as the world's largest PC company. But we're also selling to eight of the top ten hyperscalers in the world, and we're getting the perspective as the largest supercomputing in the world. So we have a lot of different perspectives here.

I would say if you look at AI over time, probably a little bit over hyped. But no doubt, the growth is incredible.

Daniel Newman:     Like a little or a little? I'm just curious. Like a little or?

Kirk Skaugen:      Well, I would say it's the lead conversation. We can do the AI and the cloud all the way down to the visualization from us as one of the largest workstation providers, down to even different phone applications and PC applications that we're seeing. So definitely prolific. The areas that we're seeing in our retail, manufacturing, healthcare. We're one of the larger call centers in the world, and we just had a review with some data from Stanford and MIT, where they're saying we can get 14% productivity out of our call center just by using more generative AI. We're working with fast food chains around the world to automate their drive-throughs, work on food safety, just how long is the food there before it becomes an issue. Automating the fryers of fast food, all the way up to predicting energy and modeling all the 5G networks that are going out around the world. So it is pretty proliferate. I don't think I need to tell you guys that. But we're seeing it from all different angles.

Patrick Moorhead:  So let's not forget about the Edge when we're talking about AI. And I know that the Edge, most of the training is done in a very large data center. Most of the inference is either done in a data center or on the Edge. And depending on your definition of the Edge, some people want to look at it as the PC and devices. Some people want to look at it as the data center Edge where it's more managed at retail, at fast food, smart transportation, smart warehousing. I'm curious, do these two worlds collide in areas? I know they do today in elements like video. But as we look into the future and the applications and the customers that you're working with, are these two playing off of each other even more in the future?

Kirk Skaugen:      Yeah, I mean definitely we see a hybrid cloud world and again, this Edge to cloud that we've built, we're a unique company in the infrastructure side, 50% of what we do is on-prem and 50% is in the public cloud.

                   So we have this ODM Plus model that we can talk about where we're basically an ODM building custom designs for the public cloud and their AI requirements, all the way down to the Edge. When we built our Think Edge portfolio, we wanted to combine five different divisions into one. So we think we're the simplest company to work for there. But anywhere from an atom based smart sign or kiosk, all the way up to a four GPU Edge server that's doing traffic detection or something like that, in a smart city. So I think it's going to be a hybrid cloud world, for sure. And we're kind of putting together a services group now also enabling everything through true scale or as a service offering, to simplify these AI deployments.

                   And it's not just hardware from Lenovo. We've done something called Lecoo and LOC-A. So Lenovo Open Cloud automation, being able to deploy the hardware, say, "Hey, I'm a fast food. I either have a drive through, I don't have a drive through, I have kiosks in my store, I don't have kiosk in my store." And then loading that personality directly from the cloud with all that security onboard. So that's been a huge advantage. Lecoo is about orchestration of what goes to a CPU and a GPU out there to help drive the right workload optimization. So I would say a lot of

our differentiation has been on the software side and the services side, to help simplifying this for people.

Patrick Moorhead: I don't know if everybody's familiar with your ODM Plus model. But as you said, you're in eight of the top ten hyperscalers, which is kind of a mind blower because people think of this as, oh, that's the world of ODMs and a certain set of manufacturers. But somehow, you've been able to put together not only the capabilities, the technology, the offering, and the business model. That has enabled you to flourish and drive some serious scale, that I'm certain it also helps you on the on-prem and the Edge, as well. So can you talk about what that is?

Kirk Skaugen: Yeah, so I think last year we had 30 year anniversary of ThinkPad and ThinkSystem on our server side. And a lot of people don't realize, but we do do a lot of our own motherboard design and manufacturing on the ThinkPad side. Starting with the latest generation of Intel and AMD, a hundred percent of our designs are done in-house for both our general purpose-

Patrick Moorhead: That's mind blowing.

Kirk Skaugen: As well as our cloud.

So with our largest cloud customers, typically when they're half a billion or a billion dollars, we'll do a full custom design. Sometimes they'll own the IP, sometimes we'll own the IP. But that enables us to build full customization for the largest hyperscalers. We do track about 588 next wave companies, as well. But I guess what's unique about Lenovo is we have 35 manufacturing plants, we have 22 million square feet of our own manufacturing. So that's why we were able to growth so fast during COVID, is we had that supply chain flexibility.

Super excited that we were just ranked in The Garner number eight of the top twenty five supply chains in the world. Us and Schneider are the top two headquartered outside of the US, and we're number three in all of tech. So that ODM Plus means design, we can either do a motherboard, we can do a system, we can do a full solution, in some cases we're even designing the data centers for people now in the cloud.

Patrick Moorhead: It's ironic how unique that is today to be vertically integrated in this space. And I was part of it, we were parceling everything out. But I think if nothing else during the pandemic, you really showed who could deliver the goods and who couldn't.

Kirk Skaugen: My favorite quote is Dreamworks, we're doing all their movies for them on our warm water cooling Neptune technology. They said we couldn't buy toilet paper, but we could get the super computer installed on time here in the US. So that was a great quote from them.

Daniel Newman: Says something about a well-run supply chain. And trust me, as we worked through the pandemic and sat on dozens of investor and earnings calls to hear what was going on, we certainly saw that there was a continuum of very well run, to very less run supply chains. And winners and losers were decided during that period of time.

![The Six Five Summit logo]

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| Kirk Skaugen: | Oh yeah. |
| Daniel Newman: | You said cloud and, Kirk, as someone that I've had a lot of opportunity to spend time with, I've kind of heard how you think about the business. Pat and I like to talk about the hybrid multi-cloud quite a bit, and that's a big theme within ISG. I am sort of curious, how do you see this all playing out? We've got this kind of ... I know we talked about the AI arms raised. But we kind of have this cloud debate that has not yet been settled, if it's going to see more and more workloads, you've hear things like repatriation, you hear things where hyperscalers are building racks and shipping them on-prem. Making them not only your client, but in some ways competition. How do you see the cloud sort of shaking out over the next few years? Is multi-cloud going to be the kind of outcome of the future? I'm just kind of curious your take on that. |
| Kirk Skaugen: | Well, we definitely believe in a hybrid cloud world. And I would say our vision for my division is to be most trusted. So we're being customer first. We definitely see some customers needing to deliver an on-prem, private cloud. We see some customers wanting to move workloads to the public cloud. And then obviously, the trend has been hybrid cloud. So we're very neutral in that, we have a open, honest conversation with the customer. |
| | We have true scale as a service where everything available from Lenovo is available as a service. And that's growing from my business over 600%, year on year. So we can deliver device as a service, all the way through a hyper conversion infrastructure is growing dramatically. Our storage business has been growing dramatically all from a hybrid cloud perspective. Because if we look at that, it's really customer choice. But if you look at our storage business, we've gone from number eight to number five of global storage, but we're also number one in the entry storage under 25K, which is about 60% of the units of storage out there. So we can deliver cloud-based storage, we can deliver on-prem software defined, hyperconverged or traditional. So that's just an example where we're probably very unique in the industry, that we span such a broad range. |
| | But the end result, I think, is it going to be a hybrid cloud world? If you want cloud-like economics, we'll have true scale, if you want to move to a full custom in the public cloud, we can have that, as well. |
| Patrick Moorhead: | Yeah, it is interesting how you benefit regardless. You benefit whether it's in the hyperscaler public cloud or it's on-prem, or on the Edge because you have it all spread across there. |
| | So one thing I know we're also in agreement on is it takes a village, right? The hybrid multi-cloud requires a lot of partners. If you're going to make connecting across public cloud and you're going to be connecting from the public cloud to the private cloud and to the Edge, you're going to have to have partners. And that's really been your heritage. One of the things that you've really pointed out is your software solutions especially, and also your ability to leverage the channel for boxes, for solutions and all that. And I'm curious, what are some of the newer opportunities for your partners going forward, that are getting them excited or you have on your mind right now? |

**Kirk Skaugen:** Yeah, so I think part of our most trusted vision is we're channel first. And well over 90% of our business, you just take the tier one cloud out is going through our channel partners. But we know in the enterprise, especially, you can't do this alone. So we're trying not to compete with our core software partners. I mean, we're proud. If you look back over the last couple years, we were VMware's innovation partner of the year twice in a row. We were in Nutanix's go to market partner of the year, we're Microsoft's device partner of the year, last week we were Veeam's partner of the year.

So I think that's really resonating with people that we can bring solutions to market. Most recently, we had a relationship with WEKA around distributed file systems for high performance analytics and AI. So I think our partner ecosystem is probably the strongest, both from our go-to-market partners downstream with system integrators, with channel partners, as well as our ISV partners.

**Patrick Moorhead:** And I think, by the way, this is editorial here, but I think when it comes to hybrid multi-cloud, customers are going to look for partners. Because I don't think there's any way they can handle the velocity of the options. And whether you pick a certain cloud for a certain application or based on the country that you're in or you make an acquisition, these companies need people to pull this all together. And I'm increasingly believing that, and not just from a software partner point of view, but from a channel partner point of view. Even if they're some of the big multinational firms, the world is just getting so complex. And last time I checked, there's going to be no magic API to share services and data between all the big hyperscalers out there.

I like that direction. And I think you've been pretty steadfast on it too, when I've seen a little bit of wavering back and forth, maybe, over the last five to 10 years in, okay, should I take this direct? Oh, I have to take this direct. Even though it used to be maybe partner focused the previous five years. Because in this market, consistency matters. Especially, quite frankly, Lenovo comparatively is relatively new to the infrastructure game. So I am seeing some of the positive elements of it external and hopefully you can keep the ball rolling. Because I know it is a trade-off between ownership, one throat to choke, profitability, the ability to deliver a complete system.

**Kirk Skaugen:** Well, we moved our solutions and services group to report directly to our CEO, kind of as our three S. So, we have the smart devices, we have the smart infrastructure, and then we have solutions and services. And within that, we have three towers. We have the maintenance business, where we're the break fix, warranty. We have managed services with true scale, and then we have professional services. And in the professional services space, we're very much just trying to fill the gaps out across all of our partners and simplify the complexity of all these solutions we've talked about today.

**Daniel Newman:** So we're down to the last few minutes here with you, Kirk. And I just want to thank you again for being part of our day opener here on day two. I always like to ask the macro questions, it's just kind of my thing. We've talked a lot about the business and it's seems there's a lot going on. But a lot of these things are going to affect the way you run your business. Meaning, we talked about the hybrid multi-cloud, we talked about generative AI and AI. We're talking about you've got a global company with employees all over the world. I'm just kind of curious, what is your

sort of feel about running a business in an era of generative AI with work from anywhere? How are you thinking about leading the team to the next wave of growth? And are you optimistic overall about how technology will continue to drive the economy?

Kirk Skaugen:     Well, I think Lenovo's a very different company than it was a few decades ago.

Daniel Newman:    Sure.

Kirk Skaugen:     Now more than 40% of our business is non PC. So it's the diversified growth engines that's helping us sustain the growth we've been on. But from a pure leadership perspective, I think it's been about hiring a global set of leaders. We're in 180 markets now, North America is our fastest growing and largest market now. But it's very diversified, pretty much where the total available market is. So that means we've had to have a global local approach. We want to take our $62 billion business and all that procurement power, we want to negotiate with our suppliers to give and pass that through to the end customer.

But local, we want to look very local, work with the governments, work with the manufacturing and the leadership team to really understand the local markets. So if you look at the makeup of who we are as a company, it's very diversified from chip companies to systems companies to software companies, that makes up my executive staff. And it's also globally diversified. There's just too much change-

Daniel Newman:    Sure.

Kirk Skaugen:     Happening in the world that I think one of the best things we have going for us is velocity, that we're able to understand the end customer trend and then very quickly turn it into solutions for our customers.

Daniel Newman:    What about sustainability? I know that's been a big focus within Lenovo. Can you talk a little bit about what you're doing there?

Kirk Skaugen:     Sure. I mean, obviously we're a global operation in 180 markets, and we're controlling 35 manufacturing facilities. So it's a huge topic for us. We're very proud that we were just ratified by the science-based target initiative on our 2050 net-zero goals. So from a overall science-based gratification of what we're off doing, I think there's good progress there from us. I think we were the first PC company in the world to do that.

From a product perspective, I would say that the major trend that we're seeing now is around just how do you reduce the power, especially around all these AI models-

Patrick Moorhead:  Exactly.

Kirk Skaugen:     We talked about. And our Neptune warm water cooling technology now is delivering 40% lower power. And we're seeing that proliferate. First it started in supercomputing, but now it's getting

into any place where energy is a big focus area. We're seeing a huge amount of warm water cooling technology, as well.

And then just looking at packaging, how do we put all this together? From bamboo packaging and vegan leather and all those kind of things around our products, as well. So it's a huge focus as it is for all of us, and we've got a good story, I think.

Daniel Newman:     Will you be writing emails back to me? Or will they be written by your generative bot?

Kirk Skaugen:      I'll test five and you tell me which ones came from me and which ones came from my bot.

Daniel Newman:     I'm wondering if I know for sure.

Patrick Moorhead:  Yeah. Kirk, thanks so much for making this day special and bringing your wisdom, your experiences. And again, it's really great to catch up with you so often and have known you for so long. I don't know what that adds other than maybe trust or-

Kirk Skaugen:      Trust.

Patrick Moorhead:  Yeah, I mean-

Daniel Newman:     It still matters.

Patrick Moorhead:  1996, I think, was the first time we met. But it's great to see you this many years later kicking butt at levels that I would've expected when I met you the first time. And Lenovo's very lucky to have you. Thanks.

Kirk Skaugen:      Thank you. And congrats on The Summit. It's been growing, as well. Appreciate it.

Patrick Moorhead:  Thanks. Yeah.

Daniel Newman:     Yeah, thank you so much.

All right, here we go with day two. We really appreciate everyone tuning in. Remember what we said, all these sessions are available on demand. So feel free to check in and watch the videos from yesterday. But, we also want you to stick with us today. We've got a lot of great sessions today, we've got more great sessions tomorrow. Thanks for tuning in. We'll see you all really soon.