AI Leadership & Enterprise AI Strategy: Akanksha Bilani on CPUs vs GPUs and Scaling AI at Intel

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I hope everybody has one, and you could call it an escape, you could call it a grounding tool, but as long as you have a place that is a reminder to you that this situation is not bigger than who you are and what you are, it really is a transformational thought that I wish everybody puts into practice.

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I'm your host, Ashleigh Vogstad.

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Today on the show, we have Akanksha Bilani, and she joins us after 2 1/2 decades at Intel, one of the most iconic companies on the planet.

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They were relevant at the time of the chip and the CPU.

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We're going to get into that today.

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And now are at the center of this craze in artificial intelligence.

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Akanksha is going to share her stories from leading a multi-billion dollar strategic multi-year alliance with AWS.

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Akanksha, welcome to the show.

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Thank you so much, Ash, for having me.

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It's exciting to be here.

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Thank you for making the time.

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You know, when I think about Intel and being so iconic, I.

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Wonder if we're at a point in time right now where we're about to witness a comeback of Intel.

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What are your thoughts on that?

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Traditionally and by legacy, we're almost a 60-year-old company.

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I do definitely feel we're back in the mix of making a comeback or reminding back our customers and our partners and our ecosystem that silicon truly matters.

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And how do you really take advantage of Silicon with the advancements we're making as a company?

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I think we're coming back with a refreshed attitude, new leadership, excited to have Labu Tan, our latest CEO.

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And if you hear him in socials, he talks about being customer focused, customer obsessed, being our biggest value.

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We're bringing that back into practicality, I would say, for our customers and our ecosystem.

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So exciting times for the company.

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and obviously for our employees and hopefully for our partners.

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So I was looking and you've actually been at Intel for seven CEOs, eight if you count the co-CEO as two seats, but there's been seven changes of the reins in your duration there.

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I'm curious from seeing these world-class leaders, what have been the lessons in leadership that you've taken away from this experience?

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There was a very common theme

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across all of the CEOs that we had.

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The CEOs have always been focused on making sure that the compute and the silicon that we manufacture is really out there to help support and service the needs of the industry, the needs of the ecosystem.

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If you look at the entire trend from Andy Grove's time to Paula Adolini, to Renee James, to Brian Zanick, to Craig Barrett,

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to Pat Gelsinger, and now with Lip Boo.

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I think the basic value of the leaders that we've had has remained the same on how important it is to listen to customer.

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I listened to Lip Boo Tan, I think it was his opening of your conference last year.

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He had only been in role weeks or days at the time of the address.

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Two weeks in, yep.

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Two weeks in.

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And he had been using this time to meet with Intel's customers and asking brave questions around how would you rate and grade our products.

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As a leader myself, I took a lot away from listening to that, and he had said, I'm paraphrasing, but that many customers had rated certain things, a D, E, and an F, and what a humiliating experience, but also, actually, that wasn't about Intel, that was about his previous role at Cadence Solutions.

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So that wasn't in reference to Intel, but Cadence.

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And while that was humiliating, it was also this ground zero to be real about what customers need and to actually build a great growth engine for the company.

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I found that quite inspiring because we can shy away from the tough conversations at times.

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So Lip Bhutan, what are you seeing differently in the culture of Intel since he came into role March last year?

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Yeah, it feels like he's been in the company for a lot longer than March of last year.

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I think he has always tracked, you know, with Intel, even coming in from Cadence.

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Cadence and Intel have been massive partners.

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We're high technology and semiconductor space anyways for a very long time, so have been partners.

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I think what is refreshing about Louboutin is him bringing this fresh perspective.

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of humility.

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If you hear him, you know, a lot of companies and organizations that have products that, you know, resonate in the market, we kind of get into the what's the next that we need to do?

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How do we modify the product?

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How do we make it?

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How do we transform it for today's industry, for today's world?

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And we don't spend enough time to retrospect.

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And I think with Louboutin coming on board, he gave us that concept that we have to also take a step back, that we have missed our mark on certain technology roadmaps.

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We have missed our mark on leadership that we should have had maybe, say, three or four years ago.

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And so he comes in with that fresh perspective to say, let's be humble.

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Let's start from ground zero.

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Let's go 101 with our customers and sit down and talk to them about the 10-year journey that they have seen

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with Intel, take the good, take the bad, and then implement the bad into something that's going to be positive and challenging for us to go out and respond back to the customers.

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So I think that vision for him to say, you know, we're not, for lack of a better word, I'm going to coin my 20-year-old here's a phrase that she likes to use a lot.

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We're not all that.

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But we can be, and we should be, and we have been.

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So let's figure out how we can be all that all over again for our customers.

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And, you know, 60 year old companies have, you know, resistance to change.

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And I think with Libu bringing in the current line of leadership, which is a complete, almost a complete set of new leaders from our CTO to our CPO to our CRO, that's really a very exciting new vision that

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Leboo has is, let's take the tribal knowledge where it's necessary and make them, put them to task on leading strategy for the team.

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I found him inspiring to listen to.

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You know, he's a very intelligent person and you can see...

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see his engineer-like thinking and working through a problem.

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I'm personally excited to see where this journey goes for Intel.

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But I also want to get to know you, Akanksha.

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It's been wonderful even through this journey of getting here to the podcast, getting to know you a little bit.

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Now, hopefully I have this right, but you've lived in seven countries, you speak 5 languages, and you went to 14 different schools.

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So I'm curious what

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You think this global mindset and being a global citizen has really brought to your life, maybe both personally and professionally.

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Professionally, it's helped me recognize that we need to keep transforming.

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Regardless of which position or which work stream you're leading for the company, we have to be agile enough.

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Since we are in the job of responding back to customers' requirements,

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We need to be as agile and quick to transform as possible.

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I've always had the startup mentality.

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Let's not just go with the flow, but let's figure out where the next flow is actually going to be or be part of the top of the wave and see where that wave is going to land you.

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So the startup mentality, again, it's because you can't take anything for granted because of the constant switches that I've made.

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Personally, you know, whether it's different countries, whether it's learning to eat different kinds of foods, whether you start to build affinity for spicy food or just, you know, different cultures, you know, and taking that all in.

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As someone who travels a lot myself as well and lived in some different places, you know, any sticky situations you've gotten yourself into or where things have just been, you know, not what you expected or.

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Many.

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When do we not have sticky situations?

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In Japan, it's just different cultures, different environments and different beliefs that every country has.

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And I go in with, my American attitude and my mentality of like just being loud and, assertive about what we needed to discuss in this meeting.

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And for about 15 minutes, there was like literally nobody that was responding to me.

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So first I was like, maybe it's, I'm just overwhelming these people.

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I think I'm too loud.

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And basically they didn't understand a thing that I was saying because I couldn't speak Japanese.

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And so, the team next to me, they were like a conch, you need to take a pause so we could translate what you're saying.

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So sometimes you just take, you know, people for granted that they will, you know, just digest every single message that you have.

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And a learning from that was that I have to sit and listen to what it is that we need to accomplish in the meeting and how we're going to be able to do that.

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And I think that is a value that we as a team, as well as what we do within Intel, have kind of put into our second DNA is to really make sure that we read our audience, we prepare, and we go in with something that's going to be valuable for the teams that we're discussing to take back home with them.

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So I think

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That's a spicy, but different kind of situation sticky, definitely, and then of course I took them later for took them later for sushi and sake, and I was...

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very, very badly humbled that they over sake'd me.

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So not a sticky situation, but a little embarrassing one, because I talked up a really great sake game.

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I was like, I'm going to, you know, we're going to do this and we're going to have sushi and sake together.

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I ended up eating all the sushi and they ended up having all the sake.

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So another sticky situation and definitely was humbled by that tremendous and fabulous crowd that we were hanging out with.

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One of the things that strikes me about you is authenticity.

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And when I hear these stories and I think about all these places that you've lived and cultures that you've experienced, you're in a global role at Intel.

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And I think there are so many people that end up in global roles that don't have those opportunities.

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and you're able to really be more empathetic, I would think.

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Does that ring true to you?

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Absolutely.

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I think it helps you really understand, just the flavor of...

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What do you want to accomplish with the stakeholders that you have in a global business?

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You have thousands or 10 thousands of stakeholders that you want to be vested in going and listening, talking, and discussing with, so everybody also feels...

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part of the journey along with us.

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So many of us in global roles think that, you know, I call it the ivory tower, the strategies, the policies, the programs that we apply in the in the global ivory tower, which is normally our headquarters, is going to be well recognized and adopted across all of the regions.

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And if we don't get a chance to go out there and really see what you thought is going to be globally or universally, like, you know, accepted is really having

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roadblocks in certain countries.

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I think that's a very eye opening experience for us and we as global leaders or even just global citizens, or even if you're not global, I urge people to go out there and just explore different cultures.

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So you get a lot more aware of how you're not all that, but also helps you transform and start to address that.

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And that would help you in every shape and form of life.

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I also want to say not every

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Everyone is as lucky as I am to have been at Intel that is a company that endorses and supports.

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having their leaders go out there and learn to make sure that we're responding again to the best way possible to our customers.

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So the companies that we work for need to have that vision to be as close to the field and as close to the customer so that as we service them at the global level, the knowledge comes back for us to, again, modernize and transform.

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We have to be lucky to have organizations like that as well.

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So I'm really lucky for that.

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Yes, I had a similar opportunity.

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opportunity, not nearly as extensive as yours, but working at Microsoft to be both at the global head office in Seattle and to be out in the field most deeply in Singapore and also New Zealand.

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And there is a huge amount of disconnect between, and some of it, it's healthy.

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It's just understanding the local culture, the local operation.

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I mean,

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Singapore is a very geographically small place.

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New Zealand has a population of 5 million.

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Those are stark differences to the headquarters being in the United States.

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The economy works very different.

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One of my learnings, being more from a marketing go-to-market background, is in the United States, you need to be as defined, as differentiated, as niche as possible when you're entering a new market, but when you're in New Zealand,

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again, 5 million people, you can actually afford and be successful at being everything to everyone to an extent.

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And it's a, it's a totally different mindset to be successful.

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And I think that's partially why I made the comment around the authenticity, because you can bring those experiences and that, that level of understanding.

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Yeah, absolutely.

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And I think you, you embody that as well.

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You know, Singapore and New Zealand are very diverse cultures, diverse places, diverse

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food's deliciously amazing.

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But yeah, when you have that flavor, oh my god, I miss chili crab so bad.

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There is this one restaurant in Seattle.

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It's called Kadamakon.

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They come close to chili crab, but I always tell them I'm a chili crab snob.

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I'm sorry.

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I can't deal with the

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lack of spice that you have in your little chili sauce, let you know how it's done.

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But I love that you have that experience and the power of empathy, as well as just being able to recognize that with this, you need to be ready to change yourself and modify yourself to be able to tell the story that you need.

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It's super important.

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And it's how you resonate and build brand as well as trust with your customers.

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So when you talk about change in yourself, reading an article and you had a stage 4 cancer diagnosis of non-Hodgkin's lymphoma in your late 20s that thank goodness, you know, you're sitting here and have come through that journey.

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Thank you.

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I was thinking about Viktor Frankl, author of Man's Search for Meaning, Holocaust Survivor, and he talks about, I don't have the exact quote, but when you can't change your circumstances, the only thing that can change is you.

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And if you'd be open to sharing, what did that journey teach you and how did it change you?

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Wow.

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So yes, it was definitely quite a

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shock.

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You know, I had a two-year-old girl at that time and just thought that I was dealing with, you know, environmental changes and had asthma because I was living in Asia after having moved from a very cold environment.

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And so I just blamed it on, you know, having asthma.

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But then, you know, eventually when I was diagnosed because I collapsed on the floor,

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It was an eye-opening moment that you can't take things for granted.

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It also tells you that you need to take stock of your health and you need to give it focus.

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And if your body is trying to tell you something, you should listen to it at ad jump.

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and don't wait till the end and drag your feet just because you've got other priorities in life.

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So personally, I think it helped me recognize that we should pay attention to things that signals are telling us to pay attention to.

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It also taught me strength that you just need to be very laser focused on getting through the journey.

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I mean, it was chemo and radiation and

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a lot of therapy that I had to deal with after.

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How long did your, my sister has gone through a journey.

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She's doing great.

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She's doing great.

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Breast cancer, but it was.

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It's very long.

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I think when they talk about your treatment cycle, it sounds like these things, you said, oh, chemo, radiation, it sounds like a moment, a quick moment in time, but actually these things can take years.

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So what was that like for you at that time?

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And you're still balancing work, I'm guessing, as well.

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So I have to tell you the story, which is why I'm so, you know, indebted and proud to be at Intel.

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So let me tell you the internal

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The personal journey.

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So especially for the diagnosis I had, which is non-Hodgkin's, the doctor said if you had to have a cancer, this is the best one you could have got.

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That's basically an 18-month cycle.

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We're going to put you through rounds of chemo, we'll put you through rounds of radiation.

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It was five tumors around my throat as well as my spleen area.

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So there was a lot of chemo that needed to happen, you know, in the specific spots as well.

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So there was targeted chemo that was also, you know, thankfully we didn't have to do surgery.

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So that journey was interesting because, you know, I just needed to make sure that I balanced it with my daughter not freaking out or, you know, forever more.

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Having this fear that mom's not well, and I don't understand why she's laying down.

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I had an amazing Ecosystem of support, you know my friends my family my parents moved their lives to come and take care of me to to to manage life when I wasn't being able to give it the attention that I needed I'm so

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certified by my coworkers as a workaholic.

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And I don't know why.

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I think we just work regular amounts, just attend to the things that need to get attended to.

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You know, there's a tough truth in here, and it's not popular, but I really believe that

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So much of my career experience and success has come from being nose to the grind and putting the hours in, and that's not eight hours a working day and 40 hours a working week.

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Yeah.

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Has that been your experience?

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It has gotten to be that I'm more aware of it, hence I try really hard not to.

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more than well, it's not never eight hours, but not more than 10.

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So you need to start to have boundaries around it.

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Because I was, you know, certified as an as a workaholic.

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Christian, my then boss at that time, actually sent an e-mail once they got to know that I was diagnosed.

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He sent an e-mail to the entire team saying, we're going to give a conscious on fake work.

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So she feels like she's doing something and we're going to give her some fake work, but you guys are not going to bother her with things that need to happen.

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You are going to have to keep the boat afloat and we'll give her some spreadsheets that she could look at and like approve.

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And yeah, just send that to her like every three days so she keeps quiet and doesn't be like, where's all the rest of the work?

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He literally told the entire team and they had my back.

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And they just kept going without ever like even letting me know that they, because I would never be okay about not being able to work in the middle of all of this stuff.

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So they created this fake work for me to be able to do it.

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And the only time that I ever found out was when, you know, I was in remission and they sent me like this, you know, congratulations card.

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there was this one person that sent me an e-mail and said, is it okay now if I give you the work that I really need you to get that **** to?

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And I was like, what do you mean?

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And she's like, here's the 15,000 emails that went about for us to make sure that we don't bother you.

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So it's a blessing to have this caring community of people, obviously, you know, that are related by blood or, you know, by friendship and childhood memories, the lifelong friends, but it's

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tremendous to have that at work as well.

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So it's a blessing.

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Yeah, was there ever a moment where you doubted that you were gonna come through?

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I did not, no.

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I didn't give myself that chance.

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I just said, I have a two-year-old daughter, I have a lot to see in life, lots of people that are dependent on me, and I'm gonna beat it, you know?

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And nobody told me otherwise.

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There were times when, you know, pain was acute, but, you know, pain is temporary.

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as is everything in life when it's painful, it's a moment in time.

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Does your yoga practice help you with cultivating this mindset?

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I took on yoga after.

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I was in remission.

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I was, I am a rigorous worker outer.

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So I do Zumba and I do

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I teach Orange theory, actually.

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So those things were have been in my DNA from since life and since childhood, been a swimmer and athlete when I was younger.

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So cardiovascular work and breathing out your oxygen when you need it has been a really good way in which I've been able to center my life despite, you know, having exciting moments.

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But yeah, yoga has definitely helped me further center

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and just giving me a sense of calm when you deal with the things that you're not aware of or are not anticipating.

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Yoga or any kind of like just rehab for your body.

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That's what I really call yoga to be.

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It's just rehab for your body.

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Anything that you take on and adopt as rehab.

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And I know that you know this as well.

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is great for you to build, your emotional as well as your physical capability to deal with challenges that come about.

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Because challenges will stay and those are actually your constant.

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Any tips or tricks that work for you, say in a work setting, you get anxious, you're stressed out about something or it's an intense situation.

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What do you kind of do in that moment to reground yourself?

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What I like to do is put it down on paper.

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So at that current moment, what I do is I try to take a step back from, going in with my immediate instinct of offering the advice, sit and listen to the problem and have everybody that is having the situation or is part of the situation have their say.

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I write it all down and then truly honestly, like old school, I do a pros and cons and a SWAT.

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Literally.

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So I have post-its all across my table at most times because, you know, again, I'm

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I'm A millennial, so I don't believe in putting it all on the laptops.

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So I post this where I'm like, I do a SWAT.

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This is our challenge.

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This is what we need to get to.

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And what are the, what's the work back of it?

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And I think at most times it's helped us see, you know, voice of reason, you know, gather together team members that also recognize that, hey, it's,

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either not that sensational or it is workable or it is so unworkable that we're going to have to figure something out and get extra support or help on.

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So just being less anxious is a constant effort that I put into place, literally mentally, so that there's calm around.

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And if you as a leader are calm, your team members and your customers and your partners shall stay calm.

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Also,

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When it's time, very much like Leboo, when it is time for you to apologize or recognize a situation, recognize it.

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Be vocal about it and say, understood, got it, we will course correct.

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That also creates a calm around the people that possibly are impacted by the situation.

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It's remarkable, I think, what a heartfelt story can do to regulate someone's emotional system.

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I mean, it is really calming when it comes

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from a truthful place, I think it can make a huge difference to a situation.

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I know definitely one of the things that yoga has taught me is, you know, I'm an excitable person.

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We're both very active leaders.

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We do deal with a lot of issues coming across our desk.

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And I think it is I like how you use the word grounding because, you

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You know, for me, sometimes it's, you know, I think a lot of women don't like doing this, but is to actually push on the waistband of my pants with my breath.

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And when I feel that physical constriction against my body, it just helps me to be more present in the moment.

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And that I'm here, I'm a physical thing, a physical body.

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And I think sometimes we just get so in our minds about things and that can be a crazy

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place, at least in here.

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Yeah.

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No, and I love that you have a mechanism to, snap out of it and remind yourself that, okay, this problem is not more important than me.

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I hope everybody has.

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One, and you could call it an escape, you could call it a grounding tool, but as long as you have a place that is a reminder to you that this situation is not bigger than who you are and what you are,

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It really is a transformational thought that I wish everybody just puts into practice.

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We would be a lot calmer in this world if everybody did it.

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Yes.

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we would.

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And coming back to Intel, and you're at this unique moment in time because chips are so hot right now.

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We have this...

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rapidly growing artificial intelligence economy.

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And really one of the, if not the scarce resource that's constraining this economy at the moment, both at the government level, the organizational level, is access to chips and to the right chips.

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And I know that this is something that you're not only incredibly passionate about, but also very knowledgeable about.

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And I thought, to take it down to some basics, we'll have people listening in from varying degrees of technical backgrounds, but what is the fundamental difference, CPU to GPU, and what the heck can you do with the CPU in the realm of artificial intelligence?

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You know, AI has become, or Gen.

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AI now has become this beast that everybody needs to tame, everybody needs to buy food for.

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Intel has had this vision of what is required in terms of technology to ensure that you can do better analytics for the data that every company has, possibly since the past 20 years.

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We are silicon vendor.

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We make our chips.

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Chips are based on vectorization.

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Chips are based on being able to program in multiple environments today.

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So how do we take advantage of technology that we have built into our chips to allow for data to be analyzed faster and better with existing infrastructure?

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So CPUs are central processing units.

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It's basically the disk that you have in your laptops, they are basically called CPUs.

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And GPUs

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are the graphics processor units, which are the accelerators.

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Intel's vision of this is busting the myth that every single AI use case requires GPUs.

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They're more expensive.

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They are an extension of an infrastructure that, you know, a company or an organization already has.

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There needs to be additional budgets for it.

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And to your earlier point, right now in the world that we're living in, supply and access to this technology is a constraint.

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So in that world, what does a customer do?

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Look at your existing assets.

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Obviously, also please involve your ecosystem of experts that can help give the advice to you.

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But really look into your infrastructure and see if you've got CPUs there that can do the work of...

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ingesting that data and helping you at least offset some of that data accuracy requirements on your existing infrastructure.

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So this is a really key point, and I want to make sure that we land on it.

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There's this myth that's being perpetrated in the market that artificial intelligence equals GPUs.

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And unless you've got GPUs, you aren't doing artificial intelligence.

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But really, the CPU is the workhorse, and that has

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been in our laptops, in our personal devices for decades now, and we are seeing a lot of artificial intelligence use cases taking place on CPUs.

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So maybe, you know, every time there's a big trend in tech, you know, blockchain, all of a sudden people are applying to blockchain to everything that was a few years ago.

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It's the similar kind of thing where we really need to peel this back to first principles, think about what we're trying to achieve, and then identify what the technology

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in terms of a chip is really necessary for.

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Absolutely.

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And actually, I give advice to organizations that are embarking on their data journey.

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There's three factors that they should keep in mind when they're building a strategy around AI.

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Number one is the use cases to your earlier point.

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Are those use cases really going to help drive profit and business and product differentiation for your company?

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So please choose them because when you have limited resources and limited capabilities within the organization, choose the ones that are going to be the biggest business impact for your company.

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The second is to make sure that you've got buying power.

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There's still an investment that you need to make in your infrastructure.

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When you do make that study of your investments, let's make sure you've allocated budget for baseline.

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And then challenge the teams to be able to drive it to the maximum of its capabilities with the infrastructure that you have, but you do need to siphon a set of skill sets or resources to be able to focus on building this platform for you.

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And last is, look around you.

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Look at what your competition is doing.

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Look at what your ecosystem partners are doing and learn.

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There's so much out there that's already been done in AI.

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AI is not, I learned about it in school and I'm old.

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So, you know, neural networks was the beginning of AI and now Gen.

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AI.

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AI is now the beginning of Gen.

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AI.

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But if you track it all, there's already a lot of learning knowledge that's already available in the open source

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world.

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Take advantage of it, test it, experiment with it, and then recognize what it is that you really need to truly do for your organization.

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Just a question in there.

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You know, you mentioned the open source world.

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Do you think Intel would ever go down a path of open source?

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I mean, we are a strong investor in the open source world today.

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So my older life before I managed, before I came to manage the AWS relationship for Intel was driving the world of software with

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within Intel.

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And we are the third largest contributor for software in this world.

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And nobody knows that.

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I did not know that.

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Yeah, it's this brand new, you know, very cool and long-term kept secret because everybody associates us to silicon and to chips.

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But chips need optimization.

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Chips need software to keep the hardware running.

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And we have been the longest, I think the fourth largest contributor in the open source world.

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Interesting.

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You're just reminding me

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And maybe I didn't get it at the moment I heard it, but LeBoutin was saying one of his three or four key drivers was software 2.0.

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Yep.

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What did he mean by that?

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That's exactly what he means.

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So it's basically about seeing how we could optimize using software, which is, you know, it could be software tools, you know, and for the geeks out there, you guys will know what I'm talking about, but Python, for example, is a, is a

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Coding script that people use for building their AI models.

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We have our own version of Python, and nobody knows that, and that provides 90% better performance benefit than stack Python.

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So, Intel itself has built and created a software portfolio that optimizes our hardware all day, every day.

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And what Libu Tan's vision is, we had it as a dedicated group.

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It was called Software and Services Group within Intel.

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And it's transformed into it being embedded into optimizations that we are building into our hardware today.

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But what Libu wants to do is recognize that the software optimization that we're building across the software that's built on top of us is getting best optimized with the hardware that's built below us.

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So that's really what his strategy is to see, the software providers of the world, whether it's on the cloud or on-prem, the Salesforces, the Workdays, the SAPs, the Oracles, the...

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all of the software providers today, they should really get the best benefit of our optimized technology through Intel's own software portfolio that powers the hardware.

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And that's exactly the same optimization that I was telling you about why CPUs can do a lot of the data ingestion and the AI and the Gen.

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AI, especially on the machine learning as well as the inference journey.

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Most of that work is done by our software capabilities that are built

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inside our chip to ensure that we're able to offset some of the cost and also take over the optimization that is required because it's our responsibility if it's our chips for our customers and our partners.

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And I'm going to say this also, NVIDIA is a phenomenal partner of ours.

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$5 billion investment.

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It's been a phenomenal journey with them, even before with the GPU journey that, you know, Jensen kicked off.

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We've always been strong partners, but as you heard, it was time that we, you know, brought to society that we have been BFFs for a very long time.

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So it was the land of reckoning

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that the society and the ecosystem recognizes that, by the way, every GPU has a CPU.

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So, okay, breaking news, a couple days ago, there was an announcement that Intel is making meaningful investment.

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You've made some strategic hires to build, engineer your own GPUs.

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Now, in the BFF world of Nvidia and Intel, I haven't seen a response come out from Nvidia yet, but I was curious how that fits into the partnership.

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No, it's a great point, not too controversial.

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It's really to ensure that we all together, as silicon vendors, are offering the best choice.

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That's a journey that we and NVIDIA have had for a very, very long time.

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Intel has been on its journey of building our own GPUs since a while as well.

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I also figured it was sensationalized in the media and that this wasn't something that just started happening a couple days ago.

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Yes, it's been over 15 years.

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We started with Nirvana.

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We took on some expanded AI journeys with our acquisitions with Mobileye, which is autonomous driving.

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And we have released Arctic Sound, which is our gaming

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GPU, which is more of an accelerator versus a GPU.

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And then about seven or eight years ago, we also acquired Gaudi, which is Habana, Habana Labs.

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which are, again, accelerators, not GPU manufacturers, but manufacturers of accelerators that have helped our customers start to use the edge AI as a place where they can do some more extended AI development to, again, offset cost of intense, fad, very robust, but virtually supply constrained GPUs.

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We've been in our own world, but like I mentioned earlier, it's about offering the right choice to customers.

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Even if you look at my customer, who I call on AWS, AWS believes in customer choice.

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And so they have Intel-powered instances, which are CPU instances.

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They have their own homegrown instances that are both GPU and CPU instances.

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And we just learned to coexist because every industry, every vertical, every use case has a different requirement.

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And this is to make sure, going back to our earlier point, of us listening intently with our customers and offering them the best choice and the best cost.

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Because they should be focused more on how they need to be agile as a company and leave the infrastructure and the modernization of their infrastructure work to

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the specialists that they've invested in, like us.

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You mentioned in there the changes in the market.

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And one of the biggest changes in the Intel market world has been your new shareholder who owns roughly 10% of the company.

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So you haven't somehow have not heard, but the US government now has a 10% stake in Intel.

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And I think a really interesting perspective that you have is that view from the inside.

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How has that changed or has it changed your daily life within the organization?

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With having, you know, US government be a strong investor as well as a believer in Intel, it's really helped reduce dependencies of having the thought process from customers that silicon needs to be built outside of America.

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And safe for everyone, foundry, what does that mean?

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So as you guys would imagine, silicon is built in fabs, and fabs are basically the engines or the mechanism or our plants to create our own silicon.

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So our foundry business are our fabs that we are building and co-designing for our customers, bespoke silicon and bespoke hardware that our customers require today.

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Intel is the only one that's based

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in the US.

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And I think the solidarity that the government showed to us by investing in us gives us a lot of pride, obviously, but also gives, again, going back to our earlier conversation, it gives the customer choice of being less dependent.

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Tariffs are a situation right now across the world.

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How do we keep the focus of investments on what is necessary for customers to acquire versus having to have the customers take the cost, the benefit of it not being manufactured in a place that is a lot more cost friendly for them?

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You know, when Labou came into the role, people were questioning what's going to happen with the foundry business.

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And is this going to be another AMD story or where is it going to go?

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But now with this investment from the government, the way I understand it is that if Intel gives up 51% of their Foundry business, the government can take another 5%.

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And we've seen actions since that time too of Labu making investments into the Foundry.

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Do you see that continuing?

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Where do you see the Foundry business playing a role in Intel in the coming years?

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I think it's an integral part of our company and our only operating engine that we've had since the beginning of time.

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And so the fact that not only can we manufacture for ourselves, but we can manufacture for our customers allows for a lot more technology and innovation coming into the country that, you know, is obviously homegrown, but also gives us a lot more flexibility to think about the art of possible.

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with what we can build for our customers and our immediate needs.

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And hopefully this becomes, it already has been become a global kind of a movement, which I think Intel is super excited about to see how we could create more and more manufacturing plants to be able to build for custom requirements, especially in the world of AI.

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It's not going to leave, it's just going to expand with the deluge of data that we've got upon us today.

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Intel is very excited about it, and I see the Foundry business staying with us forever more.

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You mentioned a lot about customers in there, and I've been excited to get to the point in the conversation where we talk about ecosystem and partnerships, which is something that you've committed a good part of your career to.

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It's a big interest to me as well.

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You're leading 2 behemoth organizations

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in a global multi-year, multi-billion dollar strategic partnership, collaboration, the relationship between Intel and AWS is multi-sided, as I understand it, and is continued to be touted in the media as really this landmark deal.

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I'm sure Intel wants more of these for that scale that you're talking about.

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But why don't you give us an overview of your role inside this alliance and

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Maybe if there's a story in there around how it all came to fruition and how it's going.

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Yeah, absolutely.

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Happy to.

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Thanks for the question.

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Yeah, so we are Team Amazon at Intel.

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So with AWS, it's been now an eight-year journey of me being in Team Amazon.

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We do two things with Amazon.

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So the first, actually three.

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The first, obviously, since we built chips, we customized this technology and the silicon to be available in these different flavors of infrastructure.

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The cloud has had a massive boom in the past, I would say, 15 years.

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We created a partnership at inception that we would customize our chips to be powering AWS cloud.

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And so, a lot of what customers are using that's in the cloud transcends, including leverages a lot of Intel CPUs under the hood, because we power cloud.

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So what's the latest in that CPU technology?

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It's interesting to hear about, you've talked a lot about custom use cases, and you're really in depth with this partnership, understanding, listening to AWS and what it is that they're looking for.

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So what does that look like?

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And feel free to get technical in terms of the chip construction.

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So like I mentioned, it's been a 20-year journey.

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We're on the 8th generation of our Xeon instances within AWS.

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In fact, yesterday we just launched another variant

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of our Intel instances on AWS that's powering and targeted for high-tech and semiconductor customers as we speak, because it's our holy grail, I would say, and it's something that we're both committed to.

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With AWS, it's unique because we've really customized and bespoke built our silicon for AWS's requirements and demands.

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AWS has almost close to 16 leadership principles, number one being customer obsession.

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And I've seen that in complete reality, in these eight years that I've been with them and working with them, where they keep coming to us and asking, can we make this tweak?

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Can we make that tweak?

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So we have this phenomenal and very flexible engineering relationship with AWS because

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Their technology is built within our custom engineering group.

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What we've done with this generation is we've used liquid cooling capabilities to help to mitigate energy usage and power conservation, reduce carbon footprint with the technology that we have built into AWS.

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And in addition to that, we've increased the amount of power that we have in each instance that allows for AWS to cater to more customers.

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because there's flexibility in the way in which we can turn on and turn off features that are needed.

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For example, you've got banks and investment houses that have their own version of an instance, while we've got...

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customers in the healthcare space that have their own version of instance, which allows basically for customers to recognize that they can just focus on moving to the cloud and leave the under the hood technology to AWS and Intel to solve for and build for.

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So it's been a great journey with them.

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And in addition to, you know, just the building and the engineering work that we do with AWS, my team works hand in hand with the AWS sales teams.

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who also call on the same customers and partners we do.

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And this is where, your original question is, it's all about the power of partnerships, where we get along our ecosystem of ISVs, our ecosystem of SIs, our ecosystem of...

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platform partners to go out there and service our customers the best that they need, depending on the industry and depending on the use case that they're migrating to the cloud.

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So it's been a tremendous journey with the team.

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AWS keeps you on your toes.

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I can imagine.

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I mean, they're known for making some pretty wild asks.

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They do.

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What has something been that's been asked of Intel that

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was maybe at first blush, this is absolutely impossible, or even something you said no to potentially.

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Yeah, and we did.

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Ten years ago, it was difficult for Intel as a product build team to ever think that we need to shave off features.

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We need to turn on features because AWS thinks it's necessary.

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Because we feel we know our products and we feel if we built the product, it's what our customers need.

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And then we have this, one of our biggest customers, Amazon, coming in and saying, hey, but we need you to turn this off, and we need this to be a little cheaper, or we need this to have more power conservation.

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So we need you to bespoke build this for us.

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And I would say, if you asked us this eight years ago when I joined the team, it was a no.

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It was a no, and we didn't have the means or the capability to even think that we could do this.

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But the request and the ask from AWS kept us thinking about can we eventually?

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And now we're at the point because we've got Foundry and we've got custom engineering that's now part of our strategy from a product landscape perspective within Intel.

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We are now able to address the challenges and the requirements that AWS has.

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So I would say AWS got us to this point with all of the asks that they make and they come to it

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While they're crazy and outlandish, they come here because they really recognize and have the best analyses of what our customers truly require.

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They're the experts in the cloud.

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We're not.

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We power cloud.

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We make cloud faster.

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We make cloud cheaper.

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But they know how to build cloud.

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And so our goal is to make sure that we try and be as agile and as customizable as possible, which

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We are at the point, at the influx point, I would say today, where we could say, yeah, we could build for AWS every single outlandish requirement that they had, but this was not the case 10 years ago.

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So again, kudos to our leadership.

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It's been a remarkable journey.

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It has been.

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What has been a personal bright moment for you in the alliance with AWS, a personal win.

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Yeah, I think the 8th Gen.

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launch.

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of instances.

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Last year, possibly September of last year, there was an alignment between Intel's sales leadership and AWS's sales leadership to combine forces and get to customers collectively.

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We used to address our customers in our own world, and our sellers were about talking about silicon and talking about our roadmaps.

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And you had AWS sellers who called on the same customers, talking about Intel instances, but talking about services on the cloud.

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So there were two parallel conversations that eventually we would get to an intersection point that would be force-fitted at a lot of times by our customer.

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We came to a final point where we both thought we recognize and speak each other's language more effectively with, you know, it's like a marriage.

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The first two years are bumpy.

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And then by the

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the 10th or the 20th year, you guys are speaking each other's languages.

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Was there a meeting or a phone conversation or a moment where you're like, this has changed, this has clicked?

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It was a meeting between Greg Ernst, our CRO, and Greg Pearson, AWS's VP of Sales.

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Greg Pearson, by the way, used to be at Intel.

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They got together and said, this is the time.

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We need to go attack the market together.

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We need to address the customers together.

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Let's go parallel program together and address customers because that is the right value and benefit for our customers.

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It's been an ask from customers for a very long time, but let's take it to ground because we think this, the agent instances is worth that technology and we can eat our own dog food and stand behind this technology and say, yes, the power of two is really going to help you, Mr.

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Customer, Mr.

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Partner, with going out there and creating a power of three.

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of just the light as well as final, happy experiences for our customers.

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So I would say the meeting September was that one moment where I'm like, wow, this is really going to transform.

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And in person, I'm assuming.

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Yes, it was in person.

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There was a lot of positive energy there.

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And then we carried that into an actual program that we launched at AWS re:Invent of last year.

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And we're starting to see this joint

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motion come together and we've only had positive feedback coming through from the customers.

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They're like, at last.

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We meet on a quarterly basis and both the Greggs high five each other that, you know, and ask us for our results.

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So it was definitely a big moment of pride for me in my personal journey when we had two big companies get together and

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come collectively to sing one song for our customers, going hand in hand and doing this definitely is something that, you know, is a moment of pride for me, but I'm also very proud of the team and my leadership, my immediate leadership to have given us that trust to be able to carry this message and this proposal to our leaders.

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And we're starting to see the results of it.

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Yeah, well, thank you for sharing, because it's these moments that really can tip the scale of what happens.

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And I run a

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virtual agency, so we're remote.

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And yet I like to say remote first doesn't mean remote only.

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And what I mean by that is that so much of the meaningful connection in life does happen in a face-to-face environment and that you can't replace that.

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And you got, you know, you have these check boxes of top-to-top alignment, right moment in time.

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You have two leaders in a physical space together.

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You're doing on-site activations at events.

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You mentioned AWS

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event.

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You made a huge splash in investment there.

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And you're also building across these three kind of classic phases of co-sell success, you might say.

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You've got that build with where you're co-building solutions, you've got your go-to-market, and then really where you come in as a leader is that co-selling side.

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Is it like actually how do we land this with our customers?

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I think that was a really powerful anecdote, Akanksha.

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Thank you very much for sharing that.

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Thank you for tracking it, Ash.

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That's great.

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It's almost like you're in my

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my team.

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I mean, you've got Team Amazon inside Intel.

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You know, we just got a power of three, like you said, as baby.

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The power of partnerships.

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Exactly.

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No, I genuinely love this space as well, and I am so privileged to have you on the show.

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So I want to wrap up here with some rapid-fire questions, if you'd be open.

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Wow, okay.

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Do they need to be fiery fire or just regular fire?

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Oh, you know, bring all the fire.

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And for those who are listening and don't

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the video.

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I mean, first, Akanksha has the most incredible hair and there is some fire glistening in it.

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There's these like tinsel strands that are just beautiful, but also a survivor because she is sitting here with a cast and a moon boot on.

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And actually, when we came into the studio today, there was a full knee scooter to roll in.

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And you only just got out of surgery this like date?

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This Monday.

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Yes.

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Okay.

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When I'm, time flies when I'm having fun and no amount of pain would have stopped me from coming to hang out with you guys.

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So.

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Warrior.

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So first question.

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We're releasing this podcast in the upcome to International Women's Day.

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I know that training, educating, supporting women's careers is something that you're incredibly passionate about.

00:56:57

And so I wanted to, and you also have a daughter who is 20 years old and just on the brink of really getting her career started currently in university.

00:57:06

So what would be a piece of advice for young women thinking about a career in like a STEM career, science, technology, engineering, and math.

00:57:16

Please do it.

00:57:16

We need you guys to have better lives and healthcare and just better engineers, with the current brain power that our youth have.

00:57:26

Please never second guess yourself and please go ahead and do it.

00:57:31

That would be my request to them.

00:57:32

And the advice would be, be confident.

00:57:36

Don't let anybody else second guess yourself.

00:57:39

You guys are tremendous humans and you have a phenomenal vision to be a leader

00:57:45

in STEM, in technology, look what's within you, see what makes you, you, and then never hold back on figuring out or embarking on the path to make that something that you could make money off of and create that as your legacy for life.

00:58:05

You are capable

00:58:07

and ready.

00:58:08

Just be confident and believe in yourself.

00:58:11

Great advice.

00:58:12

I love that word confident.

00:58:13

And even the way that you say it, it truly emanates confidence.

00:58:17

What's one value that you would hold on to even when it involves a tremendous sacrifice?

00:58:25

The value that I always hold true is to believe that you every day need to change your life and change yourself.

00:58:34

I do think that change is our constant

00:58:37

get ready for it.

00:58:39

What would be a tag, I'm a marketing person, creative person, and so I think about things as advertising copy and marketing headlines.

00:58:48

What would be a tagline that you would give to this season of your life?

00:58:54

Power of partnerships.

00:58:55

Love it.

00:58:57

It gives me so much pride to know these different strengths that this ecosystem has where we can all learn and give and take from each other so we could all develop the industry together.

00:59:12

We have the capability to do so if we just believed and we're open to the skill sets that's available in the ecosystem.

00:59:20

We are nothing without our partners.

00:59:22

Our partners make us shine.

00:59:24

It's about learning from each other and loving each other to go and drive impact in the industry.

00:59:32

The very last question is just one word.

00:59:34

How would you describe in one word your attitude to the future with artificial intelligence?

00:59:41

Cautiously exciting.

00:59:42

Cautiously excited.

00:59:43

I love it.

00:59:44

We won't hold you to the one word.

00:59:46

No, I think that encapsulates A lot.

00:59:48

And Akanksha, it has been so wonderful having you on the show today.

00:59:52

I genuinely enjoyed our conversation and learned a lot from you.

00:59:56

So thank you for making this a priority in your busy schedule to be here with us.

01:00:01

Appreciate this time together.

01:00:03

Thank you so much.

01:00:04

That's it for today's episode of Transcending Tech.

01:00:08

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01:00:15

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01:00:19

Thank you so much.