

Analyze This

Why data matters to operational success, business acceleration, and more.

- Michelle Dennedy: Hi, welcome, Privacy Sigma Riders. I'm Michelle Dennedy, Vice President and Chief Privacy Officer. Today, I have a very special guest. We're super excited to have Irving Tan. He is our SVP of Operations here at Cisco. Welcome, Irving.
- Irving Tan: Thank you, Michelle. Thank you for having me, which I know it's a very special first video podcast.
- Michelle Dennedy: It's our very first video and audio, so we're totally multimedia, so we have to send it to all of our friends and cousins and things.
- Irving Tan: I'm looking forward to it.
- Michelle Dennedy: Tell us a little bit. You're rather new in your senior vice president of operations role. Tell us a bit about yourself and how did you get into this new role, and then we'll go back into your deep, dark past.
- Irving Tan: Well, most recently before taking on this role, I was the leader for our Asia Pacific Japan business, and I held various other roles in that region from enterprise sales to running a couple of countries in the region, as well. As you know, Asia is a very exciting market. It's very diverse. It's very fast-paced, but this was very dynamic. It's a great learning ground. It represents, in a way, a microcosm of what we have to deal with on a global basis.
- Michelle Dennedy: The takeaway from this is when you kick a little bit of booty, you get more booties to kick. We bring you back home to HQ.
- Irving Tan: I always say sometimes the result of good work is more work.
- Michelle Dennedy: That's right. It's like a pie-eating contest and the prize is more pie.
- Irving Tan: Yeah, but it's been exciting. It's been four months in the new role. I'm really excited, passionate, energized about what we can achieve within operations. Obviously, we have the core parts of the business, like supply chain, IT, procurement, security, and trust.
- Michelle Dennedy: Yep, woohoo.
- Irving Tan: With this whole shift with every company becoming digital and the power of information, we've also stood up a very important new function called data analytics.
- Michelle Dennedy: After my own heart.
- Irving Tan: Yeah, and within that, actually what we're trying to do is really focus on how we connect all that disparate data we have across the company in order to help democratize it, how do we get to a

single source of truth, but more importantly, how do we use data to drive better analytics, to drive insight, and most importantly, I'm sure that every business that's out there that's listening to us, how do we drive action from the inside.

Michelle Dennedy: Exactly. Let's take a big step back. I think there are not that many people who start out really out there day to day, closing business, the adrenaline rush, bringing in the dollars that would say the sentence you just said, which is, "I'm really excited and passionate about operations." Let's dig into that a little bit, Irving, because I share your passion for operations. How does this role really bring together a business that is as diverse and dispersed as a business like Cisco?

Irving Tan: That's a really good question. I think most people would think of operations as an enabler of business. I actually view it quite differently. There's obviously an enabling function that it performs, but what I'm focused on driving within operations is how it can be an accelerator and a competitive defense sharer for Cisco.

Irving Tan: It's hygiene. We do need to create efficiency. We do need to create scale, productivity in everything that we do, but I think that we can actually help the company to accelerate a lot more by example of what we've just done with data analytics to better be able to democratize data, to be able to use analytics and data insights to make better decisions, best business decisions for where we put our investments so we can accelerate our business a lot more.

Irving Tan: We're looking at digitizing a lot of what we do within operations, so we have a whole initiative around refreshing and redesigning the digital architecture of the entire enterprise so we can automate a lot more. We can free up a lot more of our resources to really focus on value added things that create differentiation and competitive advantage for the company every day.

Michelle Dennedy: That leads me to my next question, which is with the democratization of data, and I think that's an interesting thing, because for me as a privacy person in particular, democratization is collectivism while respecting individual rights.

Irving Tan: Totally.

Michelle Dennedy: Everybody has a push forward. Everyone has distinct interests. The manufacturing teams have different interests from HR, et cetera. How do you build this common data architecture? I think we all feel like as business leaders, if I ask you are you driven by data when you make your decision, people are almost insulted. "Of course, do you think I'm just making it all up?" How does what you're talking about in building and driving an architecture differ from the idea that you're just taking in information to make informed decisions?

Irving Tan: Yeah. Well, first and foremost, we want to make informed decisions from an end to end perspective. Many times we actually make decisions based on information we have within the world that we have visibility around. That may be good for your individual function or your individual business, but it may not be good for the enterprise, hence that democratization of data and ability to understand true data, implications of decision, are they good for the enterprise as a whole or are they only good for a subset of the enterprise, but negatively affects the enterprise as a whole, is something that I'm really passionate about how we're doing.

Irving Tan: We're also quite pragmatic in terms of what we're trying to do. You touched on a very important point, that every function, any company in the world, everybody's pretty protective of their data, and so we're taking a push of not trying to create a large enterprise data lake and use policy to coerce everybody to ingest their data into it.

What we're focused on is really creating a policy that's built on an architecture, as well, to enable the right information to be exposed so that the information owners are comfortable with it, the right technology based on the policies to be able to expose that data through API so we can abstract them up into an integrated data platform that we're building out. On top of that, we're building an analytics workbench that we can leverage on the data science capability we have across the company to really help drive greater insights in our business through data.

What we're hoping to achieve at the end of the day is less about, which is still an important part, about giving us historical view of what happened, but the real power of what we're trying to achieve [inaudible 00:06:45] giving us a forward looking view of how any decisions we make would have implications for us down the road. I always call it the need to both report the weather and also the need to predict the weather.

Michelle Dennedy: Exactly, and I think it's really interesting, Irving, because a lot of the vendors that will find me, they'll try to sell me a comprehensive dashboard. I love a comprehensive dashboard, but it's kind of like when you come in and you sit in your car and you look at all of the information. I have a tank of gas, how fast am I going, et cetera. If I don't have a steering wheel, I'm still just sitting in my garage.

Irving Tan: Absolutely.

Michelle Dennedy: What you're talking about is really creating a steering wheel, and that doesn't mean that the engine is mixed in with the wiper fluid.

Irving Tan: Correct.

Michelle Dennedy: It just means that you can have this democratized, because I think the other piece to pull in the privacy and security themes around this is, I think this big architecture has to hang together with privacy and security notions.

Irving Tan: Absolutely. That's very fundamental to get the stakeholders to be comfortable opening up their data. It's twofold. One, we need to get the stakeholders comfortable exposing their data, and obviously now that we have visibility across the company in terms of all the data, we need to make sure we're actually keeping it very safe and secure and putting in the right security and privacy protocols to ensure only the right people have access to that information.

Michelle Dennedy: Right. For an operations guy, this is not normal. This is very sigma-from-the-norm kind of talk because I think typically when you think operations, you think how do we do things as efficiently and take as much cost out as possible. Tell us a little bit about your background. Where did you get your start? You have a very end to end and business-focused view.

Irving Tan: Well, first of all, I didn't start out in the technology industry, although I am an engineer by training. I actually started out working for Exxon Mobil as a graduate management trainee.

Michelle Dennedy: As did I. I don't know if you know that.

Irving Tan: I did not know that.

Michelle Dennedy: I did.

Irving Tan: I spent a period of close to seven years there. I got rotated into a different role, so almost every 12 months, so funnily enough, I started almost in a finance role in the company.

Michelle Dennedy: Oh wow. Now you're back again, essentially.

Irving Tan: Yeah. I spent time in sales and marketing and corporate planning, in operations. Went off to do my MBA, and I had kind of a big career change. I went into the management consulting industry. Worked with a company called AT Kearney. Spent time doing supply chain work in the oil and gas field initially. Then, I wanted to have a change because I like gadgets, I like technology. Things don't really change much in the oil and gas world, if you know what I mean.

Michelle Dennedy: Yeah, it's true. They're dinosaurs.

Irving Tan: Well, they're changing very rapidly now, to be fair to them. I took a strong interest in the communications and media practice. Spent a lot of time learning about it. I thought I could apply myself to it, so I really moved into that space. One thing led to another, and here I am at Cisco.

Michelle Dennedy: Yeah.

Irving Tan: Eleven years on.

Michelle Dennedy: Eleven years on. It's interesting, so a couple of stories. I'll share my Exxon Mobil story, but the dinosaurs aren't the people out there, but the commodity that they're doing used to be a dinosaur.

Irving Tan: Yes, literally.

Michelle Dennedy: Molecularly, they're talking about dinosaurs. It still is a pet peeve of mine when people talk about data's the new oil, because as I've shared with you in the past, that was something I said in 2000, but I followed it up with that it's not the new oil, it's the new currency.

Irving Tan: It is.

Michelle Dennedy: Because oil is dead dinosaur. There are different flavors of it, but data about business, about human beings, about the stories we tell to each other and the way we tell, the person who was the best guy for the job 10 years ago might be a totally different person. If you're not following that temporal path, how do you fit that into this architecture?

Irving Tan: I think you encapsulated it really well. You talked about data as currency, and one of the reasons why even in operations we are focused on data; I talked about the shift from operations being just a business enabler to business accelerator, we're looking at how we monetize that data.

- Michelle Dennedy: Yeah, how do you invest it?
- Irving Tan: How do we use that data to monetize the business, or how do we accelerate the business?
- Michelle Dennedy: That's not selling data for advertisement.
- Irving Tan: No. It's about how do we use data to deliver better services to our customers, to understand what they're using so we can deliver better feature functionality to them. Ideally, we want to be able to get to a state where we can even prevent or preempt issues that they may be facing before they even realize that it's going to happen. All that's great value to our customers, so I think that's something that we can really focus on how we use data a lot more.
- Michelle Dennedy: It seems to be in line very much. No surprise. You are head of operations, but our corporate strategy is, we really have changed. We've really transformed over the last many years here to be this recurring revenue. You can buy services from Cisco. Who'd have think it 20 years ago? Where do you see us going in the future? How does having this being currency traders, investing, saving, divesting consciously, where does that take us into the future?
- Irving Tan: Well, I think it's very much aligned with our stated goal, which is to transform the business to become a much more software-based recurring revenue based company. When you're in the software business, which we really are in today, and it's not that we'll become a pure software company. We will have software assets combined with leading state of the art hardware. When you're in the software business, you can almost say it's about selling intangible value, right?
- Michelle Dennedy: Yes, yes.
- Irving Tan: What software really does is gives you really great insight and great information into things on how people are using things, how they're behaving, what are they using it for. It's these things that are going to give us an opportunity to better service our customers
- Irving Tan: It also means that as a company, we need to transform things much more horizontally. In the traditional world that we grew up, so let's say in the hardware world in technology like Cisco did, you could actually almost just focus around your individual stove pipe, right?
- Michelle Dennedy: Yes.
- Irving Tan: As you get to a data driven world, as you move into a software world where the connectivity is so high, it means that we need to think much more horizontally, much more end to end in everything that we do. It's not an end to end view where there's a start and there's a finish, but an end to end view where it's a continuous lifecycle approach to everything that we do. Data tracks the whole life cycle.
- Michelle Dennedy: Data tracks the whole lifecycle, and it makes me wonder. There's the quote, and I don't know who said it—that culture eats strategy for breakfast.
- Irving Tan: Peter Drucker.

- Michelle Dennedy: Peter Drucker, thank you, who's always like, "You manage what you measure." For me, my mantra is, do you protect what you treasure? If you don't know what your data treasure is, you can't have a treasury.
- How do we develop a culture? We have people who have great experience in networking. They know literally where all the cable lies. How do we make sure that those people feel transformed along with us and change a culture where we understand how to share our crops? That's a real mind shift.
- Irving Tan: It is. I think first and foremost, we need to show them some initial quick wins on the value of how democratizing that data can impact them in a positive way. The other thing that we're doing also to look at marrying data scientists with some more experienced people, as well, and embedding them into the business.
- Michelle Dennedy: That's a fun thing to watch. If there was a reality show, what happens when a computer scientist comes into a hardware workshop?
- Irving Tan: Well, it's not uncommon actually, Michelle. I'm from Singapore, and I was talking to a relative of mine who works in the hospital. He's been assigned a data scientist.
- Michelle Dennedy: Excellent.
- Irving Tan: He works in the university hospital. He's been assigned a data scientist, and the data scientist's job is to figure out how we apply data science into the healthcare world.
- Michelle Dennedy: Excellent. So much to do there.
- Irving Tan: I think people tend to forget that data in itself is not as powerful as using data in the context of the business.
- Michelle Dennedy: Yes.
- Irving Tan: The ability to measure data and the data science analytics capability with a business owner and someone who has deep subject matter in the business is really how you unlock the power of what data can do. Obviously, going back to the theme of privacy, we need to make sure that we're doing it in a safe and secure manner.
- Michelle Dennedy: Yeah, yeah, especially in hospital and other settings. I think, gosh, there's so many threads I want to continue on, but I'm getting the high sign that you need to go to your next thing to actually run this business. Irving, just two things. One: best Star Wars movie of the series?
- Irving Tan: "Empire Strikes Back," without a doubt.
- Michelle Dennedy: This is why I follow this man. You should have led with that. Now I'm totally in it. I'm following. I wore my Princess Leia Resistance thing today. My favorite line from the movie, of course, is Han Solo's response to Leia's "I love you, Han": "I know." That's kind of the story of my love life. That's a different story.

The second story is into the future, what do you think, when you see things like machine learning, AI, what do you think about your role? What is the senior vice president of operations, what is the background? Where are we going there?

Irving Tan: One of the things that we're changing within the operations group: We still have to continue to focus on the here and now, continuing to deliver highly optimized productive services to the company. But we're also building capacity to look over the horizon a lot more. How can we utilize some new technologies, like AI and ML, more into the core processes of our business? We're really starting to do that, right? Today, it's still pretty nascent, I would say. We're very much focused around using that technology and systems and automation to remove a lot of manual labor that we have in the company.

Michelle Dennedy: Stuff we actually don't want to do.

Irving Tan: Yeah, stuff that we need done but a lot of business processes where we have a lot of human putty, as I call it, to get stuff done.

Michelle Dennedy: Yes. I love that: human putty.

Irving Tan: You want to be able to automate all of that. We want to be able to apply machine learning and artificial intelligence to all that. By doing that, we're able to upscale our talent to really focus on the next stage of competitive advantage that we want to drive for the company. To me, it's all about continuously, how do we use technology better and how do we continuously reposition the human capital that we have to continue to create advantage for business so that we can achieve our goal of business acceleration and just not business enablement.

Michelle Dennedy: Yeah. I love it. I know I'm supposed to wrap, but I can't resist since you're here. One last question about what you're talking about in leveraging really what the best optimizing people's potential at work. Where does that fit in with all these initiatives for inclusion?

Irving Tan: Yeah. Well, again, we want to harness the collective knowledge and wisdom, right? I'm a big believer in inclusion and diversity, whether it's gender diversity, whether it's generational diversity, experiential diversity.

Michelle Dennedy: Global.

Irving Tan: Right. I think by being able to bring all those ideas and being able to have that safe environment to put points of view on the table and have robust discussions, we actually end up with much more holistic, well thought through, robust outcomes at the end of the day, so big believer in that.

Michelle Dennedy: I think it really does democratize your data at the end. Well, Irving, I'm going to get crushed and probably get fired by ultimately you if I don't let you onto your next thing.

Irving Tan: That's not going to happen, Michelle.

Michelle Dennedy: Do I get my raise? I said on the prep call that this would be a great time for you to pull in the Bentley or the Aston Martin."

Irving Tan: Nice try.

Michelle Dennedy: Ugh. I had to ask. Thank you very much.

Irving Tan: Don't ever stop.

Michelle Dennedy: You know, you don't ask, you don't get.

Irving Tan: True.

Michelle Dennedy: Thank you so much, Irving. It's been a pleasure.

Irving Tan: It's my pleasure. Thanks Michelle.

Michelle Dennedy: Thank you. It's a wrap, guys, our first video. Woohoo!