

Patrick Moorhead: Panos, it's great to see you. Thank you so much for kicking off this track for the Six Five Summit. I

mean, getting to know you over the last few years has been pretty awesome.

Panos Panay: That's awesome.

Patrick Moorhead: I appreciate you doing this.

Panos Panay: You're so nice. Are you kidding? I'm pumped to be here. It's fun. Then you're polite and you're so

nice, Pat. I'm excited. Excited to not only watch and spend time watching your event, but also

just be here with you now is great.

Patrick Moorhead: Oh, I appreciate this. Listen, there's nothing... Well, I'm an ex-product person. I love products,

okay? One of the benefits of my role now as an industry analyst is that I can advise on a lot of products. I can be part of so many product launches and developments. I'm like a kid in a candy store, but you actually have the best title at Microsoft, I think, which is chief product officer.

I mean, how did you get into this and how is what you did for the previous decades gotten you

ready for the big role?

Panos Panay: Oh, it's a good question. I do feel like I'm lucky. I feel blessed to have the title I have and be able

to do the job I do. Sometimes it can mean responsible for everything and nothing at the same time. It just depends. Yeah. I'm also responsible, as you know, for Windows all up in Surface as the brands that I oversee in the product lines and businesses, but product for me too, that's

what I am.

I'm a product maker, near and dear to my heart. It's what I've done, Pat, for, I don't know, the better part of 25/30 years, I think. I hate to reflect on how old I am so I ignore the actual dates

and timelines.

Panos Panay: People ask me like, "How do you think about every detail? Why do you care about so many of

the nuances? What is it about understanding the customer or who it's for, or why does that

matter so much?" I said "Product making is this collection of so many things."

I tell the team, and especially new people joining the team, you're here because of your history. You're here because of all the things that you've done to get you to this point, especially as a

product maker. You have to believe in that history, you have to use it, everything we've learned.

When you talk about growth mindset, it really is about what have I learned along my journey that includes success, failure, that includes the most trying times and maybe even the most simplest or happiest of times? All that, including us, in our childhood, like where we came from

is part of the motivation when you make something or build something.



As a product maker, I feel like we're all product makers, but for me, I started getting my hands on devices when I was a kid, six/seven years old. I was lucky. My dad was a hardware engineer and he had this love for tinkering and building products. When I was, I don't know, six or seven, I would be in my room and I'd go to bed, like any child, if you will, at that age, at bedtime. I'd go to bed, I'd complain.

I didn't want to go to bed, which doesn't make sense to me now. I'd do anything to get to bed. You get to bed and I laid down and it turns out at that time, my father and I shared a room. I mean, it was my bedroom and it was his office. He would come in every night, Pat, and he would work on his hobby, which was building either a TV or a radio, in this case, a TV.

He'd have the tube and he did his own soldering and he had everything laid out. He had 2D drawings that he would work off of. It was amazing what he would do. The best part was he would always know I was awake and so he would just ask me to join him. We wouldn't tell mom, of course. I'd get out of bed and I'd get at it. Honestly, just being with my dad, that was years of building products.

He's here visiting me in Seattle right now so I feel lucky to be able to still spend the time with him. I told him I was going to talk to you today and we did talk about a little bit about what we made and he gets this pride and he still has the original TV that we built. I mean, it's pretty ugly for sure. But at the time it felt it was beautiful, and then for what it was being made for, incredible.

Through my career, I was able to just hit different points and I'll call that, and maybe not at six or seven years old, a career, but it is. You're learning, you're finding the things you fall in love with, the tinkering, the building, the making. I did that my whole life. I ended up actually... There were two moments in my career that I don't talk about a lot, but one of them is I joined M&M Mars/Kal Kan.

A lot of people don't know that about my history. What I did was production management and moving dog food around the country, and cat food, I should say, dogs and cats. I know that seems interesting, but at one point, Pat, to make sure the quality of the dog food was right, we used to taste it and eat it. That's part of just understanding it. It's ironic that I would actually taste dog food versus now I dogfood all my own products.

It's almost the same thing, what we talk about. I think that's where that quote comes from. I went to a Japanese company. After that I went into tech and I spent four or five years with an incredible set of Japanese engineers. Just walking me through the details and what it meant to build a product, what patience meant, what every detail meant, the beauty and how something can come out of a product like that.

I spent my years just feeling like... No, I think the whole time just learning what it really meant, and then pulling that all together, ended up at Microsoft. I came here to work on mice and keyboards, and that was 18 years ago. It just evolved through all the hardwares. It's quite a while.



I'm pretty sure that I used every mouse and keyboard that you worked on. I mean, it's so funny too, that the industry was trying to get rid of the mouse and it just keeps coming back. It is amazing. How on earth do you take your knowledge of mice and keyboards and turn it into the Surface line? How do you go from mice and keyboard to Surface?

Panos Panay:

Look, back then mice and keyboards were there to complete an experience and while they seem like simple accessories or maybe something you attach to what you do, imagine life without one of those two things right now.

Think about that idea that hardware can complete a software experience and then take that and evolve it to actually the hardware and software need to be made together to create perfection. I think it was about 12 years ago or so, got tapped to go create a product. I knew hardware. I knew it pretty well. I knew software, but also how you brought something to market with Windows. That was what I had spent four or five years on.

We were having some pretty good success and then when the company was developing Windows 8 they had this thought on, "Hey, how do we complete that experience with hardware?" That's what we did. We went from the ground up. Surface wasn't even called Surface when we started, Pat. It was just, let's go build it. It was a tablet. Let's build a tablet. At the time I was working on the Surface table, if you remember it?

Patrick Moorhead:

Yes, absolutely. My Silicon was in the first generation of that.

Panos Panay:

That's right. I think if you just cut to building this product, there were 12 people. We got together. We put together our visions and thought a little bit about what it could be. When we started, it was pretty intense and it was different. Like you said, there were multiple Silicon parties involved.

It was definitely a sensitive topic for the company. We had to do it all in secret. It was culturally shifting, if you will, in many ways. Then we went through generation over generation. We ended up getting to the vision that the team originally had, which was Surface Pro 3 and hit the ground and took off.

We anchored on a bunch of cultural attributes as a team and what it meant to us to build these products and what it meant to complete it for the company and bring Windows 8 to life. We went for it. By the time Surface Pro 3 came around ultimately to Surface Pro 4 with Windows 10, you start to see some momentum and took off from there.

The team started as 12. I don't think I want to tell you how many people are on it now, but let's say it's a couple of thousand more than 12, probably at this point.

Patrick Moorhead:

Yeah. By the way, that same timeframe, Surface Pro 3 and Surface Pro 4, was when I saw liftoff that said, "This is a product line that has staying power." Hats off to you for not bailing after a couple of intense.



It really showed to me how strategic this was to a company, because the PC environment is you make a small mistake and it is going to be very costly and that scared people in the industry. At the time, people were very risk-averse. They were afraid to try things, right?

Panos Panay:

Yeah.

Patrick Moorhead:

For fear of failing. One thing that I really admired was that you stuck your neck out time and time again.

Panos Panay:

I mean, I remember apologizing on stage, Pat, at one point, but it really is not necessarily me sticking my neck out. It's the truth of the company starting something, sticking with it, knowing that the purpose was right. How you bring hardware and software together to make an incredible experience.

Satya had come in right around that time and was part of that bet on, "Hey, to have permission to be in the hardware business, we do need that end-to-end product that people love." That was it. That was a bet that I think still pays off today. You got to hand it to... There were so many senior leaders of the company that were just willing to be patient.

I think in product making, and just in general, one thing I learned, and even from my early days before Microsoft, was patience. Patience. Then let your love flow into the product, let your expertise flow into the product, let your vision flow into the product. But none of that works without patience and perseverance of course.

But really it's about, do you have a vision? Can you stick with it? That's what product making is. You know what it's meant to be. You know what it should be. A customer is telling you what they need, patiently get yourself there. Getting there with the first version's always almost impossible.

You can get pretty close and maybe even sometimes hit it out of the park, but really it's about listening to your customer after that and understanding what they need. Then you can pretty much thrive. Kudos to the company there just sticking with it and the leadership here at Microsoft for doing so.

Patrick Moorhead:

Two years ago, a company puts you, in addition to Surface, in charge of the leader of Windows, which it's funny, I remember all the conversation and all the talk, "Oh my gosh, the guy from Surface who's competing with me moving to this Windows thing. What's this guy like?" I actually had to field questions from your customers on, "No, no, no. Talk to Panos. You're going to love it." Right?

Panos Panay:

I don't know.

Patrick Moorhead:

Sure enough, today they're just like, "Yeah, I really appreciate the point of view that Panos has because he has empathy for what I do." Right?



Panos Panay: Yeah.

Patrick Moorhead: Tell me how did this come to be? This appointment, and what are some of the things that-

Panos Panay: I think we just-

Patrick Moorhead: ... meets the product?

Panos Panay: The conversations are around at least two/three years ago, we have such a great opportunity to

remove these seams between hardware and software. It's what our customers needed and that's where it started from. Windows 10 had done incredible things for our Windows customers. You're talking about over 1.2 billion or so people at that time, or 1.1 billion using it.

It was about, how do we really take you one step further? The conversations with Satya, Rajesh, others, it really was about, what is the next phase of Windows? How do we bring it to life in a way where people fall in love with it again, as opposed to just need it? That was the

conversation.

People need Windows, but really for me, my passion is I want people to love it. I want people to want it. You want to open it and feel good. A big part of that is making that seam between hardware and software go away, actually a massive part. My partners, they're amazing. You think

about the OEMs.

Patrick Moorhead: Exactly.

Panos Panay: Dell, HP, Lenovo, Acer, ASUS, Samsung, you look at these partners and they truly are... They know how to build world-class hardware. They understand how to build incredible products.

know how to build world-class hardware. They understand how to build incredible products. They have supply chains that are just to die for. You see that opportunity for... You're talking

about serving over a billion people, Pat, and what is the most selfless way to do that?

It's bringing as many partners as you can, look at that seam between hardware and software, listen to your customers, and then let's go get something elegant done that people love, because kind of that transition in our industry has been like, "Hey, I want to fall in love with the product I

use." I don't think people use those words. I get it. I've used it a lot, but it is that.

It's meaningful to me the thing I use every day, the people I connect with on it every day. Then now you have Windows 11, it's being adopted faster than any other OS we've ever shipped. It's ramping. The usage is awesome. The people are finding ways to get different things done. There

are new behaviors created through the pandemic and those behaviors are sticking.

Windows 11 is enhancing the ability to get into the things you want to get done. There's a lot of pride in that. As much as pride working with my partners, as much as it is this team that built Windows 11 using all of the history of Microsoft to do that, I think it's been a good journey. It's been a fun journey so far. I mean, it's just the beginning, I hope, but indeed it's been fun.



Yeah. I want to talk about collaboration real quick. We just saw just a complete retrench of how we work. I think your team had some really smart viewpoints on it. As analysts, we like to think that we're first to the trough with these great ideas, but one thing, I'll admit that I picked up from your team was to say, "Patrick, this hybrid thing is going to be harder than remote and it's going to be harder than where were before."

Sure enough, we're here, and I'm curious, Panos, you've got Windows, you've got the operating system and the experience there, along with your own first-party hardware and the rest of the partners, how do you view the decisions you're making towards the future related to improving that collaboration experience?

Panos Panay:

A couple of ways to think about it. One, what you use to collaborate it's different, it's different for so many people. You have to think that way. We're building a broad-based ecosystem here. The first thing to think about is that's different types of cameras, different screens, and probably most importantly, different applications or experiences that people use.

The trick is for us to remove as many seams between all those things as possible. When you and me want to connect, we remove them. Then the next step for us has been, how do we emotionally connect people? In a way that, hey, I want to be with you right now, Pat. I don't want to be here. Where are you? In Austin, likely?

Patrick Moorhead:

Exactly.

Panos Panay:

And I'm here in Redmond, and you go, "Okay. It'd be so much better if I was in Austin." Basically because I want the sun today and I don't think it's coming out. But I'm not. I'm here. It's a behavior that has shifted and it's okay. This gave us the chance to connect. That is the behavioral shift that's going to stay where we can choose.

There's a balance, hey Pat, you want to meet in person or should we get on this call? It'll be a choice. The choice should become one that it's ubiquitous, it's continuous. It doesn't matter which it is. It's just, what's better for us today? To make that true you got to connect with each other in a more emotional way.

Whether that's perfection through the rendering of the screen, if you will, or the imagery, or it's the connection, eye to eye, or it's a simple background blur, because I want some privacy, whatever it might be, the nuance in that, now we're back to product making, the details are going to matter. Our team's been looking at this for a long while, pre-pandemic.

I mean, it's so fun. I remember maybe three/four versions of Surface ago we were celebrating the camera and people are like, "Who uses a camera on a PC?" As a matter of fact, I remember being in a room and people were saying, "Why don't you just take out the camera? It's expensive. Nobody needs it. They're not taking selfies with their computers." Pat, is that amazing? Like can you-



Isn't that? No. No. I totally forgot that was the case, but you are absolutely right. I remember

that.

Panos Panay:

I would show a Skype video, with my daughter and I, like, "This is how we're going to communicate in the future." People go, "What are you talking about? Don't you have a phone?" If you take all that, what it did is it gave us a view of anchoring technology. Now we have this ability to not tax the CPU as much, don't tax the GPU as much.

Let's make sure we optimize the PC, the design point with our partners at Intel, AMD and Qualcomm. Let's make sure we're optimizing everywhere in the stack for each opportunity that is an application. Then you can centralize that around Windows in the Silicon to do so. That's where our focus is, like, "Hey, remove as many seams as you can."

In this case, these aren't actual physical seams you will ever see, or the seam between software and harder. I'm talking about the seam between you and I. The easier I can make one-touch calling, the easier we can get connected, the clearer this call is, the better the speakers are, the better the camera is, the better the microphones are, and quite frankly, the simpler it is to get in and out of a call, that ubiquity that's happening right now in collaboration will only get stronger.

Then we get back to the vision of let's choose, Pat, do you want to meet face to face today or do you want to meet on this call? What's more advantageous for you in the rest of your world?

Because it won't matter which it is.

Patrick Moorhead:

God, I love it. The other area that I have to admit, I didn't think I was going to get sucked into emotionally, but I did is what you're doing with inclusive design. I mean, listen, Panos. I have empathy. I'm kind of a hard-ass from the Midwest, and it's like me getting sucked into these things, so I have to tell you, what you're doing in inclusive design has made me cry before.

Go back and watch the previous summit interview that I did talking with Surface folks. Can you share what you're doing here and what you did with the Ability Summit?

Panos Panay:

Yeah. First thing to focus is yeah, we shouldn't underestimate. I mean, one in every four people in the U.S. are disabled. That's not something to just be like, "Oh, okay." I mean, when we design inclusively, you have to design for everybody. You're talking about one in four people in that sense. You go, "Of course."

I think in the world, there's over a billion, and I mentioned that at the Ability Summit, people that are disabled. Just think about that. The demographic is still growing. My job is to build products for everyone. Think about Windows. Windows isn't for a select few, Pat. We don't just design it for the cool people or or a certain age group.

Patrick Moorhead:

Exactly.

Panos Panay:

We design it for the tech leader or anything. We design it for everybody. That's challenging at times, for sure. There are trade-offs that are going to come with it. Everybody includes literally



everyone. I have a real soft spot here for a lot of reasons I probably won't ever talk about personally, but I will tell you is meaningful to me up and down.

The stack has to be perfect for disabled people. Dave Dame joined my team, I think about a year ago now. I don't know for sure. He inspires me so much. Dave will tell you stories, how look, everyone's going to be disabled one day. When he said that to me, eventually we all get there, but some of us are getting there sooner, it hits you so hard.

You just realize there's so much opportunity to make things better for people. We can say word words like we're going to change the world and stuff. I believe that. Don't get me wrong. We are going to empower every individual on the planet to achieve more. It's more than belief. It goes deeper. I don't know. It's hard to explain.

If you take a look, if you have a chance for those you watching, go watch the Ability Summit. Don't watch it for like it's a cool show. That doesn't matter. Go watch it for the impact that each of us can have on the world with the changes we're making. We launched a new adaptive mouse. We have the adaptive Xbox controller before that. We have the adaptive kit.

We fundamentally are enabling more keyboard scenarios with our adaptive keyboard, our hub, and some buttons. Those things are awesome, but you start to realize this is not commodity product making. This isn't build one for everybody. This is build one for each person and who they are and how unique each of us are as people.

I think that matters to all of us, to your point, that you just made. Like if you just sit back and think about it for a minute, we're all part of making that thought of inclusive design true for all of us. Some of that includes stuff you may not understand why you do it, or others may not understand why we have done it, but at the end of the day, if we can design for everyone, that makes a difference for me.

We did that through Windows. One note for just on this journey is when we create a product or when we're designing a product, and I mean that from every feature in Windows is a product to me, and there's a lot of them. I mean, a lot of them, Pat. I can't give you the numbers. They intimidate me even when I say it, or if it's a hardware product or if it's a partner's product.

The thing we start with is that specific design point of, how is this inclusive? If it's not, why and where? I think when you start from that, you end up with something beautiful at the other end. We don't always get it right. Let's be clear. We don't always get it right. But we will work pretty damn hard to make sure we do everything we can for people.

Patrick Moorhead:

If you were getting it right every time I would think that you're not taking enough shots and stretching enough. What's funny is we get older and particularly industry analysts like me that have to pretend like we know everything. When Dave uttered the words, "Everyone will be disabled eventually, sometimes some of us just get there sooner." I literally froze.

Panos Panay: That's right. That's the quote.



I was just like... I couldn't believe. I was looking at it as also this other thing, this is for other people, right? It's like, no, this is going to actually likely be for me sometime in my life. Then it became real.

I think what you've been able to do, because part of this is education because it is a village and we need more people doing a lot of this, but that was a good way to make it real for people. Hats off to you. I went through your lab that you had set up. I went through there-

Panos Panay:

Oh, it's a tech lab. Yeah. Yeah. It's amazing.

Patrick Moorhead:

Exactly. I went through there about a month ago and it was first rate. Hey, I have to ask, want to wrap this up here. I have to ask you about Build. I mean, a lot of stuff going on with Windows, a lot of Windows stuff. It's like, wait a second. I heard out of the peanut gallery, "Well, Microsoft doesn't talk about Windows anymore at Build."

It's like, here we are. We're talking big time Windows during Build. What was the highlight for you? I know you love all of your children the same, but what was your highlight?

Panos Panay:

Yeah. Yeah. Thank you for saving me. Oh, come on. See, you just did it. You just did it. You told me what I can't say. Look, there are so many people that work on Build, Pat, because it's not to work on Build per se. It's the work that's done on the products that then manifest themselves at Build to be spoken about.

Each one of these things, people put their heart into it, whether it's Voltera or it's Azure compute on the local device, the new Microsoft store pieces, third-party widgets. They're all pretty dang cool.

Patrick Moorhead:

How about if I bracket it to Windows and Surface, does that help?

Panos Panay:

No, doesn't help at all. I'm still going to upset somebody. Somebody gets upset, but I'll tell you, look, it's fair to say Voltera was a lot of fun. If you were paying attention to Project Voltera, there's so much behind it. It's opportunity for devs to really take advantage of just new processing power and a different way to think about compute.

For me, well, I get a little bit geeky there, but that's where I go, "Well, there's something super romantic about all that, how all that comes together." I think I, just at heart, am not a dev and I want to be a dev. I guess my job now is to give as many tools as I can and hope that they love what those are.

I have an incredible dev team, if you will, just a development organization that thinks about devs, creates tools for them all the time. I'm pretty blessed to be part of that. I think if you force me, I would go Voltera brings in a lot of Windows, a lot of Surface, a lot of OEM opportunity. It brings everybody together.



I'm okay saying that Window's dev kit was probably the... That's the only answer I can give you without getting myself in trouble with my best of friends.

Patrick Moorhead: Listen, my company spans chips to SaaS. But if I had to pick the Windows and... I mean, it

would've been that too.

Panos Panay: Okay, good. I'll take it. All right. Yeah.

Patrick Moorhead: Can you believe that? No. No. We didn't talk about this beforehand or anything like that, but

yeah, that would've been my favorite. I don't know, I might have to get on your website and sign

up for it, give to my son, Patrick, and see what he can do with it. Gosh, Panos-

Panos Panay: I'll tell you what, when it's ready, we'll get it to Patrick and see what he can do with it, for sure.

Patrick Moorhead: Appreciate that. Panos, thank you so much for this. I'm sure the audience loved it. I appreciate

you bringing in some of the personal stuff and I understand it's sometimes hard to do, but when it's in context of how you got in here and how Panos thinks and how his team thinks and reflects to me on what we can expect and the passion for your product, if you can't get passionate for a

product, people shouldn't even be in products, right?

Panos Panay: I'm with you.

Patrick Moorhead: It is something that I have truly appreciated about working with your team. They're all

passionate about different things and making things better and thoughtfully thinking through

them. Anyways, thanks for your time.

Panos Panay: I'm grateful. I'm grateful. You had me, Pat. Be well, my friend.

Patrick Moorhead: Thanks.