

Episode 2: Chris Castro Climate Intrapreneurship: Think big, start small, scale fast

Chris Castro ([00:00](#)):

We decided to go door to door. We started on my personal house, but then my neighbors door to door asking, would you be interested in this pilot? We're thinking about turning your front lawn into a farm.

Chris and Coraline ([00:11](#)):

What is this, Mishkis"? No. What is this that we're looking at? We're here in the compost. Are you ready to turn the compost ?

Yesh ([00:28](#)):

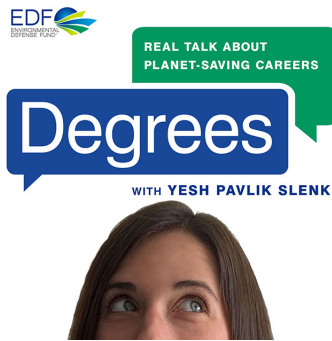
Castro and his daughter Coraline are in their garden in Orlando, Florida. What might seem like just a sweet moment between father and daughter is actually far more. Chris is teaching his three-year-old about composting. It's a symbol of the revolutionary work city leaders in Orlando and all over the globe are doing to rebuild better. Cities are no longer waiting for national initiatives to fight climate change. They're rolling up their sleeves and they're doing it themselves led by visionary environmental leaders like Chris Castro. Orlando is the most visited city in America. Now it's Chris's goal to make it the greenest city in the nation.

Yesh ([01:15](#)):

I'm Yesh Pavlik Slenk. And this is Degrees - "real talk about planet saving careers" from Environmental Defense Fund. I'm really excited to share this conversation with Chris Castro. Chris joined the city of Orlando as the Director of Sustainability and Resilience in 2016, but his title doesn't even begin to capture Chris's drive to fight climate change and environmental injustice. And just a few years, he's helped start solar co-ops he's increased electric vehicle adoption, and he's helped low-income residents invest in clean energy. Chris believes that greening a city doesn't justify climate change. It also helps communities and families prosper. One of Chris's most exciting initiatives. Doesn't just reduce the massive carbon footprint of the food that we eat. It also helps end hunger and feed families. It's called fleet farming and it turns front lawns into working farms. I asked him to describe it. Fair warning: my conversation with Chris is going to completely upend the way that you think about city government forever. Chris, thank you for being here. Welcome to Degrees.

Chris Castro ([02:28](#)):

Thank you. Yes, it's great to be here with you.



Episode 2: Chris Castro Climate Intrapreneurship: Think big, start small, scale fast

Yesh ([02:30](#)):

Chris. When I think of Orlando, I think of a bustling city and a famous mouse. I don't think of front lawn farms. What made you even think to turn front lawns in Orlando, into farms like real life feed your family farm.

Chris Castro ([02:46](#)):

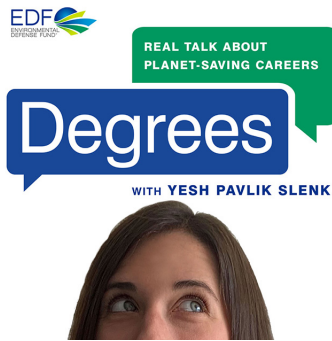
You know, across this country, there are over 40 million acres of lawns, residential homeowner lawns, and obviously the industrial agricultural complex has a huge impact on the planet and on public health. And you know, this notion around fleet farming was how do we start to turn these neighborhoods into assets that can help us achieve our, our food demands? And, um, and so it was really daunting to figure out, well, how do you even go about starting this? Is it legal? Is it, I mean, there's so many questions that we can get into this analysis paralysis mindset, right? Where we may never, ever start anything because questions continue to come up.

Yesh ([03:26](#)):

You're really speaking to me here, Chris. And I imagine a lot of our listeners who want to use their careers to make an impact to fight climate change. Um, but a lot of people, I think when facing that, uh, that balance of where they want to be and how to get there, they struggle with moments of fear. Can you talk a little bit about maybe any moments that you've had when, uh, it just seemed like it was all insurmountable.

Chris Castro ([03:52](#)):

Uh, one of my business mentors, his name's Edmund Luevanos once taught me, uh, you know, that in order to start and initiate something, we have to think big, we have to start small and then we have to focus on scaling fast to make the biggest impact possible. And I brought that same notion to fleet farming. When we were starting out, we decided to go door to door. We started on my personal house--but then my neighbors--door to door asking, would you be interested in this pilot? We're thinking about turning your front lawn into a farm, and we'll share the food with you, all the food that we grow and the excess food we can take and we can sell to low-income farmer's markets. And that was the overall vision. And from one house, we grew to five houses from five houses. We grew to 30 houses. Now there's over a hundred homes that are participating in fleet farming throughout Orlando. And I think, uh, the challenge is doing something. Initiating the first step and, and getting past that often just mental barrier of whether or not this is going to be successful. People are afraid to fail. And I think it's important for us to fail and fail quick so that we can pivot and continue down this journey of making impact in whatever we're passionate about. Um, you know, little by little, you iterate, don't be afraid to just



Episode 2: Chris Castro

Climate Intrapreneurship: Think big, start small, scale fast

start and do and fail and learn from those failures so that you can use those as learnings to be successful.

Yesh ([05:10](#)):

I love that you've given yourself permission to fail and to learn and to try again. One thing that strikes me about your success is that you bring people together, uh, whether it's convincing them to turn their front lawn into a farm or start a project in their community, you seem to be a magnet for people who are doers like you. How do you build good teams around you?

Chris Castro ([05:36](#)):

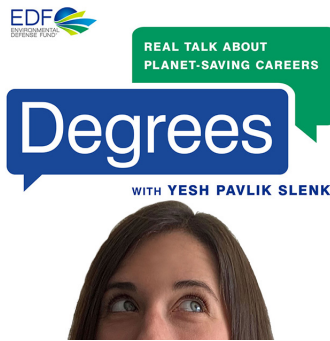
I think-- that's a really good question. Yes. And I don't know if I have a specific recipe for, for building a team, but you know, people align with people who are passionate about something. They want-- people want to find a tribe. They want to be part of something that's bigger than themselves.

Yesh ([05:58](#)):

Especially now. My mom would definitely be part of that tribe. She is most comfortable in an old t-shirt and shorts. There's dirt forever under her fingernails. And she refuses to call dirt dirt. It's called soil. Gardening or farming can be a pretty solitary endeavor. How do you make your fleet farmers feel like they're part of something bigger?

Chris Castro ([06:19](#)):

Um, one thing that sets fleet farming apart, that's pretty unique is we're very focused on community engagement and getting people experience in where their food comes from. And so one of the events that we host with Fleet Farming is called the swarm, the swarm like these swarm. Uh, we basically host a bike ride where everybody comes together at one central location. Usually it starts at East end market. We all get on our bicycles and we literally swarm around the neighborhood, going home to home and teaching people how to grow food, while also maintaining these plots that, that these homeowners have turned over to us. And that type of edible education experience is life-changing for people. We've had, um, grandparents take their grandkids out and do this as a bonding exercise. We've had parents come out and bond with their kids and, and, and just an amazing amount, dozens of people every weekend who come out on this experience, volunteering their time to learn how to grow food in Florida. And of course, that's not a very easy thing to do.



Episode 2: Chris Castro

Climate Intrapreneurship: Think big, start small, scale fast

Yesh ([07:21](#)):

I have this vision of people on bikes with gardening tools, strapped to their bodies and a clicking noise, following them down the street. Uh, can you tell me the why behind people being familiar with where their food is coming from? You know, what's, what's driving you to make that connection for people.

Chris Castro ([07:44](#)):

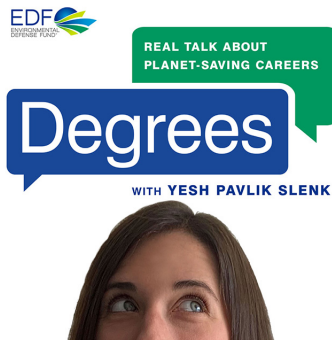
So, um, I think over the course of, uh, you know, hundreds of years, we've, we've moved into this kind of industrial agricultural system that really disconnects us from the food system. Right now, every plate of food that a person eats every day travels between 1500 and 2000 miles per person per plate per day. That's absurd. The amount of energy that goes into growing one calorie is a 10 to one fossil fuel to food calorie ratio. Meaning we put 10 times the amount of energy into growing the food from fossil fuels, then we actually get in calories eating the food. And so there's this huge discrepancy. And it also contributes significantly to the climate crisis. So the whole notion around fleet farming was to do a number of things. One, inspire and empower people to grow food. Two, hyper-localized food production. It's not enough to be a hundred or 200 miles away. It needs to be grown within our communities and hyper locally. And three, do so on zero emitting forms of transportation, like bicycles, that help to minimize the direct carbon emissions from food production as well. And that became our why around fleet farming and the overall challenge for us to solve and building this really innovative social enterprise model, um, of turning lawns into farms.

Yesh ([09:06](#)):

What stands in the way of people farming in their front yards? I mean, it seems so practical and we've seen it done successfully. Victory gardens were a huge deal during World War II. What keeps people in every city in America from doing this?

Chris Castro ([09:21](#)):

So there's, there's a couple of different obstacles. As an example, in the city of Orlando, there is no zoned agricultural parcels in the entire city of Orlando. We were one of the first cities to allow for front yard farming, actually edible landscapes in the front yard. Um, uh, 60% of our front yard now can, can be edible and a hundred percent of the side in the back lawn. And in many cities, there are actually cities where people are fined and they're charged for growing fruits and vegetables in their yards. And it's absurd.



Episode 2: Chris Castro

Climate Intrapreneurship: Think big, start small, scale fast

Yesh ([09:50](#)):

That is absurd, frankly. That's an opportunity that's ripe for change. Sorry, I couldn't stop myself from making that terrible joke, but seriously, are there vegetable police walking the streets that I don't know about. Listeners check your city ordinances and change the law if growing mint on your front lawn is illegal. Okay, Chris, I read somewhere that you were born with green thumbs.

Chris Castro ([10:18](#)):

Um, when I was growing up in Miami, Florida, um, as a second generation, Cuban-American my parents-- I was lucky enough to have parents who really, um, got me outdoors and, and try to bring nature into my life. My stepdad had a Palm tree nursery and then our own family business. And that really gave me a very unique experience in, in connecting with the natural world. I actually grew 5,000, what we call Washingtonia palms as part of, uh, a scholarship to get into college. Wow.

Yesh ([10:49](#)):

That is the most unique scholarship I've ever heard of. We definitely didn't have that one growing up in Wisconsin. What was that like?

Chris Castro ([10:57](#)):

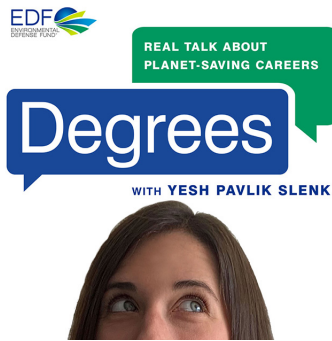
So we bought 5,000 seeds and I grew them from seed, over a four year period when I was a freshman in high school all the way until I graduated as a senior. And it gave me this work ethic that I think really has been instilled in just me as a person, uh, and has allowed me to chart forward as an entrepreneur in many different ways. And it really dawned on me that if I was going to spend time on something for the rest of my life, that working to protect and preserve and regenerate the environment was something that I felt aligned with.

Yesh ([11:33](#)):

What strikes me is the timing. This was 2007, right before the great recession hit. Did you have a moment of doubt where you maybe thought about going into the private sector or, uh, putting this dream on hold for a little while?

Chris Castro ([11:48](#)):

I didn't actually, I thought that this is, uh, one of ways in which we can get out of this recession. And we were fortunate to, uh, be able to elect President Obama who as part of their re you know, his recovery approach was driving forward, clean energy and sustainability through things like the energy efficiency and conservation block grants and, and really prioritizing, uh, moving



Episode 2: Chris Castro

Climate Intrapreneurship: Think big, start small, scale fast

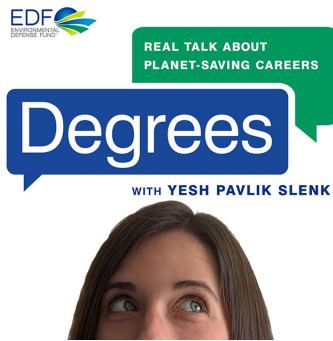
our economy in a cleaner direction. And, and that helped me actually, um, reinforce the decision that I was, I was going down.

Yesh ([12:22](#)):

So you double-down on your instinct to work on protecting the planet. And then while you were in college, you started this environmental non-profit called Ideas for Us, which is today an official United Nations NGO with chapters all over the world. This is fascinating listeners. If you haven't already checked out their website, I highly recommend there's a chapter in Uganda working on renewable energy solutions. Then there's one in the Congo, planting trees. So many chapters around the world where students are coming up with their own creative local solutions to environmental challenges. Chris, when you started this group, did you have any idea that it would get this big?

Chris Castro ([13:03](#)):

Never. We were just thinking let's bring together this interdisciplinary student group that, that tries to come up, not just with campaigns, that we can advocate against their for, but actual solutions projects that we could implement on our own accord and in partnership with the university that would actually start to move the needle. Uh, one of the first campaigns we did was, um, actually put pressure on the President of UCF to commit to carbon neutrality. And we ended up passing a student referendum where over 80% of the population said, yes, this is important for our future. And I remember the President, the president Hitt said, okay, Chris, we've made this commitment. What do we do next? And that's where ideas for us really took hold. It became this organization that was the think tank and do tank for achieving carbon neutrality and moving UCF in a more sustainable direction. So we did things like we started a dorm room, energy competition called "Kill-a-watt", and it was having students compete just through behavioral changes on saving energy and providing scholarships for those students in those facilities that actually showed significant savings. We ended up getting the attention of secretary Steven Chu and even the white house that solicited a press release about students who were, you know, working together to save energy. We ended up starting recycling programs in the dorms and throughout campus. We started the on-campus garden. We even wrote a \$750,000 grant that we were awarded to add 107 kilowatts of solar PV on campus. And so students got to get experience in writing the grant and actually designing the system and putting a hard hat on and installing the panels, uh, which was tremendous. And so, yeah, it, it became this sustainability firm on campus that was driven by students to accelerate this work.



Episode 2: Chris Castro Climate Intrapreneurship: Think big, start small, scale fast

Yesh ([14:54](#)):

Chris, it's kind of a stereotype that city government isn't creative, um, and you've brought a lot of innovation to the mayor's office and to all of your projects. Um, what obstacles have you faced trying to make those really wild ideas happen? And, um, and how do you inspire a big government agency to move in wild, exciting, creative ways?

Chris Castro ([15:18](#)):

Um, one of the biggest opportunities we have is what I like to call intrapreneurship this notion around, um, getting into an existing organization or institution and trying to change it in a direction that moves towards sustainability, through creative business models, through creative policies or programs that may, may be implemented. And I think what we're going to see more often than not is individuals who have knowledge and sustainability, getting into a corporation or getting into a local government and using that experience to bring about change from the inside. That's intrapreneurship.

Yesh ([15:54](#)):

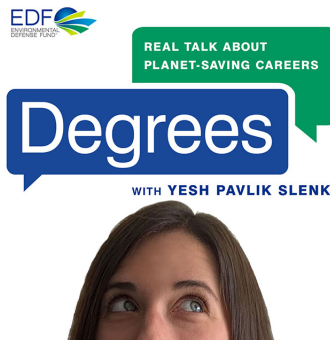
Um, you've chosen a mission-driven career along every step of the way you've, uh, really focused on that mission. You focused on that passion. What are the upsides of that and what are the downsides?

Chris Castro ([16:07](#)):

Um, well, the upsides are, especially if, if the passion is around, um, you know, the triple bottom line and moving towards a sustainable future, there are so many areas that one could put their skills and talents to advance, right? It's not just engineers, it's not just environmental scientists. It's literally every single discipline possible, uh, that we can imagine that, uh, that needs to be a part of this transformation. And so, um, you know, for me being mission-led, I think has aligned my core values and the person who I am with the work that I do every day. And that has, um, for better or worse again, uh, transitioned this from the work that I do to the person that I am. Right. It's become who I am. And, um, that, so on the upside is, I don't know when I'm working and when I'm playing ever. Um, I'm constantly doing this on weekends on nights. Um, and then on the, on the downside, I also don't know when to stop.

Yesh ([17:07](#)):

I hear you. It's a problem I experience. It's a problem. I think a lot of our listeners experience there is too much to do in the day and not enough hours, especially when we're running against the clock on climate change. It feels, everything feels so pressing.



Episode 2: Chris Castro

Climate Intrapreneurship: Think big, start small, scale fast

Chris Castro ([17:25](#)):

You know, I, early on with Ideas for Us was just infatuated by its potential and put so much time into the organization, uh, that I, I forgot about some of my friends, some of the important people who have been there for me, uh, around the clock and, and also some of the people who I loved, you know, some of my partners and, uh, there have been cases I've lost friends and I've lost loved ones because, um, maybe not directly because of Ideas for Us, but because I didn't quite find that work-life balance. And it's something that I continue to work through every single day. I've been fortunate to find a partner who supports me in the work that I do and understands the importance that I have, um, that, that I'm working towards.

Yesh ([18:12](#)):

Uh, well, I can tell you personally, I am married to someone with an entrepreneurial spirit, and this is something we work on every day. It is not easy. Uh, so this is my official pitch to the producers of How I Built This. Please start asking these famous entrepreneurs, how they manage their work-life balance and how specifically they maintain their personal relationships. Well, they're making these big impacts on our society.

Chris Castro ([18:42](#)):

Um, that's, uh, sometimes could be a challenge when you're trying to balance work-life balance and your family and raising my daughter and really being attentive to her in these early stages of her life. Um, and so I've, I'm trying to do better at finding what that balance looks like. And one way I've, I've been doing that is integrating our activities, um, that we do together as it relates to sustainability. So gardening as an example, or going on bike rides together and, and to, um, you know, give her those types of experiences that make me happy, that align with the mission that I'm on, but also allow me to spend some meaningful time with my family.

Yesh ([19:18](#)):

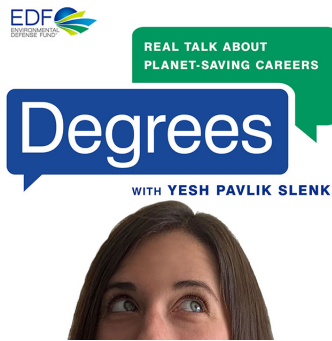
And I know from an earlier conversation that your daughter Coraline has become your favorite gardening buddy. She might even be the youngest fleet farmer.

Yesh ([19:26](#)):

She is three years old and she pulls me every single day when she gets home, pulls me to the back door and says, let's go to the jardin, Papi.

Chris and Coraline ([19:34](#)):

What is this, Mishkis? No, what is this that we're looking at? Is it compost?



Episode 2: Chris Castro

Climate Intrapreneurship: Think big, start small, scale fast

Chris Castro ([19:46](#)):

So she's like all about going into the garden. She loves tomatoes, that's our favorite fruit, for sure. And, and just her, um, getting engaged in the soil, getting dirty, getting, uh, you know, involved in nature. Something that I feel is going to be critical in her upbringing. And I want to do everything I possibly can, the way that my parents did to make sure that she values the natural world. And isn't disconnected the way that many of us are, but really embraces it, values it and understands our place in it.

Yesh ([20:19](#)):

In our last couple of minutes. I just want to ask you what advice you would give, and this could be to your younger self or to, uh, people who are starting out on their sustainability career journey. Now I'm in a very similar situation to where you were back in 2008 facing a recession. What would you tell them? What would you tell yourself back then?

Chris Castro ([20:39](#)):

Get as much experience as you possibly can get? Hands-on experiential learning by far is the most important thing. Most of the work that I've done in the last 15 years has been voluntary. And I think that it's important for us to get experience, especially in areas that you may or may not be strong in.

Yesh ([21:02](#)):

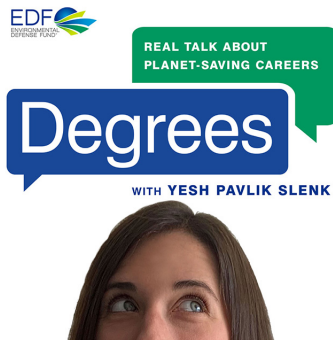
And it sounds like if the opportunities aren't available because of COVID, to make your own opportunities, knock on people's doors, ask them what help they need, and really go after those experiences to make your own progress, to get that, that leg up.

Chris Castro ([21:15](#)):

Exactly. And just start, do something fail fast, you know, think big start, small scale fast. As we talked about.

Yesh ([21:23](#)):

Chris, you said before that someone passionate about this work doesn't have to do what you did. They don't have to start a nonprofit or a company that they can find opportunities within their own organizations within their own jobs, within their own cities to change it from within.



Episode 2: Chris Castro

Climate Intrapreneurship: Think big, start small, scale fast

Chris Castro ([21:40](#)):

That was the mindset that I had when I got into the city of Orlando, I had already started a, a company, Citizen Energy, that was doing clean energy consulting in commercial and multi-family businesses. We were already very engaged in Ideas for Us. And I thought that if I was going to impact my community, there was nothing better than for me to join Mayor Dyer's team and try to figure out the strategy of moving Orlando, the most visited city in America, moving Orlando to be a model for, for sustainability.

Yesh ([22:11](#)):

Uh, I was not expecting you to say that. And, and frankly, my vision or my understanding of Orlando is shifting in this conversation. Can you share a few more examples of what you've done to move Orlando in that direction?

Chris Castro ([22:27](#)):

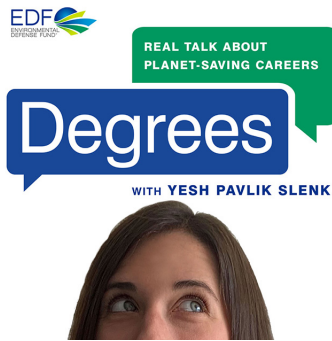
Um, we've started these solar co-ops these, uh, essentially group buying programs that allows residents to access more affordable solar by buying together, essentially bulk purchase aggregation. And then we have this backyard composter initiative. Every resident in Orlando has access to get a free, 80-gallon composter, not only assembled, but delivered to their door and the way that we've been able to essentially pay for that and offer that service is by avoiding the tip fee at the landfill. And so if we can educate enough people to use their compost bin, to dispose of their organics versus the trash bin, then we can actually save taxpayer dollars. And we started to do the calculations and realize, man, if we can buy these compost bins in bulk, we can more than save the amount that we're going to spend in tipping. Right? And so now we have over 8,000 households in Orlando, composting in their backyards, diverting food waste and food scraps so that they can create soils and hopefully grow food in their own gardens, right?

Chris and Coraline ([23:27](#)):

What'd you put in their food scraps. Okay. What type of food, scraps? Food scraps.

Chris Castro ([23:37](#)):

And use that for their front yard garden that we've enabled as well and have this whole system. These are innovative aspects, but again, it's going to take to drive forward the sustainable feature. We're all going towards. And hopefully that gives you some examples of things that we're starting to do in Orlando.



Episode 2: Chris Castro Climate Intrapreneurship: Think big, start small, scale fast

Chris and Coraline ([23:58](#)):

I want to see it! Now let Papi turn the compost. Okay. Uno, dos, tres...

Yesh ([24:05](#)):

What do you, uh, what do you hope for Coraline's future?

Chris Castro ([24:09](#)):

Well, I hope that, um, I hope that we truly begin to address a lot of the inequities and the injustices that we're seeing around this country. I want her to grow up in a future where everybody actually is free and everybody actually is equal in this country. And we realized that that is not the case, especially for those communities of color. I also hope that we truly turn, uh, turn us around as it relates to the climate crisis and really do everything we possibly can to keep our temperature rise below the 1.5 degree, uh, and, and do everything that we can to accelerate a cleaner and healthier future.

Yesh ([24:48](#)):

Chris, thanks for being with us.

Chris Castro ([24:50](#)):

Thank you so much, Yesh.

Yesh ([24:52](#)):

That's our show for today. Thank you listeners for tuning into Degrees. For more about how Chris Castro and mayor buddy Dyer are working to turn Orlando into a model for sustainability for the rest of the country. See our show notes. If our message resonates with you, please share this podcast with a friend and ask them to subscribe. That's the best way to support our show. And please write a review, give us a five-star rating on Apple podcast, Spotify or wherever you listen. Follow me on Twitter at "Yeshsays", and we're online at [degreespodcast.org](#), that's [Degrees, podcast.org](#). We'd love to hear your thoughts and questions about the show. Degrees is presented by Environmental Defense Fund. Our producers are Rick Velleu and Amy Morse. Our executive producer is Christina Mestre. Our production company is Podcast Allies with Elaine Appleton grant and Lindsey O'Connor. Engineering by Matthew Simonson. Music editing by Becky Paige. Our theme music was written and performed by Lake Street Dive tune in to our next conversation. I'm your host, Yesh Pavlik Slenk. Stay fired up, y'all