

All right hello everyone. This is Tom Fox again, and I'm thrilled to announce our next speaker, Christina Marcello. Currently content manager at Pod Chaser where they provide coaching on guest booking, podcast marketing, and client relations. They are also the executive editor, excuse me, executive producer for the Robert Manny Radio on.

K c a radio and the associate producer for Inside the Vault with Ash Cash. Fabulous. Christina became a certified audio engineer at the Institute of Audio Research and began their career working in recording studios across New York City. From there, they transitioned into working. To the terrestrial radio scene as the executive producer of an Amfm News radio show and the host of a public affairs program.

Christine really is one of the most passionate people I've met around audio and great sound. I'm gonna communicate that. So with that, Christina, I'm gonna pitch it over to you. Wow. Thank you so much, Tom. That was a really lovely introduction. Thank you so much for that. I will go ahead and share my screen with you now and we can just get right into it.

All right, recording audio and how to get quality sound anywhere. Now I was gonna go over a little bit about my background, but Tom, I think you did such a great job. A few things that I would say just to add onto that is A couple highlights. So I love audio. I think that's the one thing that I would like to let everybody know.

I really do love audio. I started off as Tom mentioned as an audio engineer, and I think that encapsulates a lot of why I got involved in this. I started off in college radio and as a lot of people do shout out college radio. But from there, I really just found my passion and my love for audio.

And when it comes to building microphones, when it comes to recording audio, when it comes to anything audio related, I wanna give the introduction. Hey, I'm Christina. You could also call me Mars. Either way, I'm your audio friend. Feel free. You'll see along the way I have a couple QR codes that's gonna link you to me and how we can connect offline as well, or out of this environment.

Just wanna cue this. No matter what, after you leave this conversation, you need any audio help, any audio needs shoot me a message dm. I'm more than happy to have any conversation surrounding the audio. So that is me a little bit about who I am. I wanna get to the plan, but I have to fess up.

You, you may have heard me as I jumped on this call. So two things happened, and this is what happens in live audio. My HE headphones actually broke off into the laptop itself, and so you will see that I'm actually using Bluetooth headphones, which, hey, we do what we have to. I want you to, we'll come back to this because it's important that you wear headphones when you record.

I wanna give you another scenario that happened, which we're gonna talk about as well, but just things that happened on the fly and it's just funny how that happened right before this conference. And I'll give you a little background. I'm getting ready for this conference.

Really excited about it. A little nervous. And all of a sudden my headphones break off and it's oh, geez. Oh no. Okay. All right. Solution. But then my neighbor goes outside and does the age old mowing of the lawn. It got a little loud, so I'm gonna, I bring that up because I want to talk to you about that at a little bit of a later date in turn or not date a little bit later out throughout this presentation to tell you what I did and why I did it.

That's gonna be included in the plan as well. First and foremost though, concepts, I wanna talk about concepts of audio because when putting this presentation together, I thought to myself, how do we record quality audio? What's audio? How do we record something if we don't know what it is?

So that's why I wanna start off with concepts. We're gonna go right into equipment after that. That's pretty much the nuts and bolts of what a lot of people are looking for, I think, in terms of how to decide what equipment is, good equipment just what you need to know in terms of purchasing and moving forward to, to get really set up.

And unless but not least, we're gonna look at some recording tips. Just some general thoughts that I have and I'd love to share. So gonna dive in. I'm gonna try not to speak too quickly, but I have a lot that I wanna jam in here. Let's see how we. All right. I'm not sure if you can see what I see, but it says, but first, what the heck is sound

That is the question. What is sound? I think when we think about sound it's to our disadvantage because we don't think of it as something that's tangible. We think of it as just this metaphysical thing. It floats around and we can't see it. And so we don't think of the characteristics that it really has, but there are some characteristics to sound that we should be.

Let's go into that right now. First and foremost, we talk about what is. Sound is vibrations. What is vibrations? Vibration is anything that's moving. So if it's moving, it's creating sound that's really important. And again, it may seem like an obvious concept, but this is something that you can take into any recording situation that you may find yourself in.

We talk about how to record quality audio anywhere. This is something that you can take in your back pocket and keep with you. You go into a new surrounding. Or maybe you're gonna start your own podcast and you're trying to identify what room is gonna make the most sense for you. Things to keep in mind is that not all movement is as obvious, right?

And so right now you are hearing sound from me. My mouth is moving, so that's great. But really what's causing the sound that you hear are my vocal chords, a little bit less of an obvious movement. Another thing that might be a little bit of a less obvious movement would be an air conditioner or a heating vent or any of those types of things.

A machine any type of machine typically will have a motor and that motor of course is moving. And then again, it will cause vibration. So we just wanna keep in mind anything that move moves is sound. So when you walk into a room, if you do see an obvious sign, like a fan, maybe it's cooling you off, but at the same time it is produc.

Movement, which is producing sound. And so we really wanna make sure that we identify weak points within our room and within our recording space so that we can make adjustments to make sure that we do record quality audio. So movement equals sound. Got it. Again, how do we use this? What's the practical application here?

Practical application is again, what I just talked about in identifying a room. Just keep this in mind. If you do see something moving, you're going to want to turn that off. Typically now, something like an air conditioner, you may not be able to turn off, and we're gonna get into what to do in that situation next.

But if you can turn it off, you're gonna wanna do that because what the objective here is to capture your voice. Your vocal instrument, it's to capture the instrument by itself. We really don't want any extra noise. Something that I think that I love to think about and I. I would love to have this conversation offline if anybody's interested, but the connection between video and picture and audio.

And so again, it's to our disadvantage in the audio space that we can't see it so readily or so clearly. Now we have devices that we can use to capture it and then translate into some type of picture that we can readily understand, but with an actual picture, with video. You're, there are a lot of relations, so let me just dive into what I'm really trying to get at here.

So when we record, we want to record one thing so that we can get the quality sound. Now, if I were to take a picture and I said I want a a nice picture that's really of just me, and it may be a headshot, right? I

want that headshot nice and tight. I don't want it too tight because if it's too tight, it's gonna get distorted, it's gonna get blurry.

You don't want it to be too far away either, because if I take the picture and my subjects a little bit further away, that's not a great headshot. You're gonna see my kitchen table or the refrigerator or whatever have you, it's gonna take away from the quality of just you. I use that visual representation to come back to audio if we're gonna be recording.

An instrument, we want to make sure that we're as close up to that instrument as possible without distorting, without getting too close. But we also don't want to be too far away. Okay, cool. That is a little bit about, again, how we can tangibly identify sound and make it work to our benefit.

Now the way that we measure sound is through the amount of times that it oscillates into, creating this frequency. So a vibration becomes a sound wave and a sound wave. We then look at it as a frequency. Now I talked to you about frequencies because again, I wanna look at the characteristics of audio and how we can use those to our benefit.

Now I'm gonna go to the next slide, but beforehand, I would ask you, and again, you don't have to answer of course, but I would ask you to sound bend and. Let's just go into it then, right? So yes, sound does bend, but there are different aspects of sound. So low frequencies are going to be different than high frequencies for low frequencies.

They're gonna be more readily able to bend, they're going to be able to travel further distances. They're more likely that you're gonna actually, literally feel them than hear them. I like to think about low frequencies. When I think about like the club or the bar or that person who's just bumping their music a little bit loud in the car.

When you hear those things, you're hearing the right, those are the low frequencies. They move in and out of the car. They made it out into the street from the bar because they have those characteristics. High frequencies do not have those same characteristics, so they move a little bit differently.

Quite literally, they move differently, and so they're more directional. A high frequency sound is more likely to bounce the wall and just maybe bounce a little bit back, but again, it's very directional. It's not going to be as likely to bend or. These are things that we should keep in mind, again, for our recording process, because we wanna know about, when we think about audio and its ability to bend and bounce and all of these things, we wanna be able to identify how to work and manage with those frequencies as they bend and move and take on their life that they do.

And. I'm gonna take a look at my microphone right now. I'm gonna take a, I told you we were gonna talk about something. We'll talk about it right now. So in going ahead and getting my audio set up today, I realized that my neighbor, of course, it's funny because somebody commented this about this on LinkedIn.

My neighbor is like right before we started this call, started up their, my their lawnmower. And so these are considerations that we need to keep in mind. Again, our environment is important and so you can't just go into a recording thinking Yeah, I'm just gonna turn on the mic. Your mic, especially depending on what type of microphone you're gonna buy, is an incredibly powerful tool that can pick up different vibrations.

Monitoring your space, making sure you have, the right environment is crucial to being able to capture quality audio. Now what did I do? Because I wanted to come on this and I don't want you to hear my neighbor. Now, this microphone that I have right here is a condenser microphone. We're gonna talk about that in a moment.

It is very sensitive to sound, and so what I did for this recording is because my neighbor is unfortunately mowing their lawn, I am actually not using this microphone, so I could hit it right here. You're not gonna see anything or hear anything because I turned it off. I'm telling you this because these are the types of considerations you need to make when you are recording audio.

So I know that the MacBook microphone that I'm using was created in a different fashion than the condenser microphone that I have here. The condenser microphone that I have here is used in studio settings. Again, it can capture beautiful audio. If we're talking about a picture, I'm talking 10 80 pixels.

Beautiful quality audio. The MacBook has a really great audio frequency range as well that it captures, but it primarily focuses on my voice and the frequency range there. I have to double check. I'm 90% sure it's a dynamic microphone. Again, we're gonna talk about that in a moment, but I brought this up to just let you know, sometimes when recording settings, especially in live, you're going to have to just pivot and make do with what you can.

And These conceptual pieces are important to know because without having that conceptual background, maybe you just continue to use this microphone that's a condenser microphone and it's gonna pick up everything. Whereas, maybe we just pivot, unfortunately using the MacBook mic, but it's going to make it better than what I would be picking up.

Should I go ahead and use this condenser with my very loud? All right, so other ways that we can go ahead and attack the objects in the room. The audio as it bounces. I wanted to tell you about my mic so that I could touch it. . And so I'm, I wanna touch my mic so I could show you this, right? So I go to, talking to my microphone.

My voice is projecting to the microphone, but it's also going beyond the microphone, and it's going into my screen, right? I'm looking at and it's bouncing off the walls behind me, so you can just picture, again, some level of visual that when I speak these frequencies are just bouncing off the walls here.

It's important to note because you don't want to have too many vibrations. When I hopped on this call, I actually ask am I re, is my reverb a little wonky? The reverb is the noise that you're gonna hear, the tail end of of your audio. And so when the reverb becomes too, Far apart from the audio, if you're following with me, if not, we're gonna get there.

But the, if your reverb is too delayed, it can actually cause an echo. And these are things that you wanna be mindful of in recording. So we don't want that echo. We don't want a wild reverb. How do we go ahead and get rid of those things? Again, knowing that audio frequencies can be absorbed, we're gonna identify weak points within the room to treat, to make sure that we can put acoustic treatment or whatever we need to do to make sure that the audio isn't going to bounce in a way that it's going to disrupt our recording.

So some things that you can do to. To manage those expectations of quality audio is to identify materials that are absorbent and materials that are not absorbent. So if we, this is actually, you can think about it in terms of liquid. Again, as much as audio's not tangible, we have things that we can compare it to and make sense of.

With that being said, let's take a. Like a just a glass window. A glass window is incredibly reflective. If we were to take some liquid and pour that on there, it also would not absorb it. Again, it is not an absorbent material, but a blanket, a pillow. These are very absorbent materials, so if the room that you're identifying as a room that you wanna record in, And it has windows, then a good idea and a best practice method would be to take something to go ahead and put over the window to absorb it.

Now, a very heavy blanket comforter. Those are the types of things that you're gonna wanna treat those areas with so that the audio, so your vocals, whatever instrument you're recording, gets absorbed there and doesn't bounce right back into your micro. Okay. Okay. Okay. I've gone on a lot about concepts.

I'm running a little short on time. I'm gonna, I'm gonna get into how do we actually record the quality audio we're looking for. You're gonna wanna have a solid setup, right? You don't just want to use your iPhone mic or your phone mic, or whatever that may be. You are going to wanna invest in some quality studio equipment.

Now the two pieces that you're absolutely going to need are going to be the microphone and the headphones. Now a microphone we can talk about. There are going to be two basic different two different microphones that we could invest in. There are going to be USB microphones and XLR microphones. A USB microphone.

Let's just think of it as plug and play, right? You wanna have a conversation or you want to tell a story, or you're a solo narrator. This is gonna be a great microphone for you. Just grab a USB mic. It'll plug right into your computer, and you can just go from there. Now, an XLR microphone is going to be a microphone that requires this piece right here that you see an audio interface.

So to break it, The USB microphone plugs right into the laptop. No issues. An XLR microphone, you go, XLR microphone into the audio interface, and then the audio interface into your computer. That's the signal flow or the path that we'll be using to capture audio using an XLR mic. Now, why would you use an XLR mic versus a USB mic?

So easy to plug and play. What is this XLR doing? Why do we care about an audio interface? A USB mic is great. Typically though, you're only gonna be able to record one person at a time, and so if you are looking to have multiple people have a conversation and record it. It's gonna be a little bit difficult to again, use that usb, so you're going to have a better time using an XLR mic, which will have more inputs in that audio interface.

As in the audio interface. We'll have more ways for you to plug that microphone in more destinations for you to plug that microphone in. Another thing that we should think about when we talk about an audio interface is actually that the audio interface. Is for all intents and purposes a translator.

It's a dedicated translator as. And so when you use a USB microphone, you're plugging that mic right into the computer, as I mentioned. That's great. It's not a, there's no dedicated translator for it though, right? It just goes right into the computer from the microphone. And so when we have this audio interface, the microphone plugs in there, and it goes through a dedicated translation conversion to be able to then send that audio into the computer.

It's gonna provide a more crisp sound, a more clear. Recording or image, if you will, when we capture audio through an audio interface. That being said, hey, if a USB mic is what your jam is, by all means there is really no wrong way to, there are a few wrong things but audio engineering in general, as much as there's a science to it, there is an art, and so please have fun.

Try things out, make mistakes, learn from them. It's okay. It doesn't have to be intimidating. A lot of the best recording techniques that we have are actually just coming from mistakes that people made. So please don't let audio engineering or recording your podcast recording whatever you may be a barrier.

It doesn't have to be. Alright, I'm jamming on time, but we're gonna talk about headphones really quickly. You'll see these Bayer Dynamic headphones in. I like to use. What I wanna tell you about headphones in de general is you don't wanna use in ears. Please. You're not ears, use in ears.

I think that the ear pod AirPods are incredibly convenient. And there's something to say about all that. But what you're doing is you're putting an you're putting this instrument for all intents and purposes, a speaker right next to your ear drum. And so I don't mean to be a parent or anything on you here, but it's going right against your.

Your ear doesn't have the same restorative properties as other parts of your body. So again, I'm gonna, I could go on and on about not wearing any ears. Don't wear any ears why you wanna use out, other headphones that go over your ears are because of a few reasons. But one thing I wanna get across to you as well is going to be the ear fatigue.

Now ear fatigue is some, your ears get tired, believe it or not, just. You get tired throughout the day, your ears get tired. Unfortunately, your ears don't have caffeine though. So I'm not sure if you've ever experienced this, you get up the next morning and you turn on your TV and it's oh my gosh, who was listening to something?

And it was at me. It's incredibly loud. Cause the night before, your ears got tired and so you just turned up the volume and. There it is, . So you wanna get headphones that are geared towards preventing ear fatigue if you're gonna be recording a lot of sound. And recording podcast. All right, pop filters of windscreens.

I'm gonna blow through these. They basically do the same thing. They're gonna help reduce the wind that comes through and they're gonna help reduce the. Close s that come from those P sounds. Windscreens are gonna be better for on location pop filters better for in studio. That being said, you'll see right here I'm in studio, if you will, and I have a windscreen.



It's gonna be whatever fits your preferences, whatever fits your room the best. Microphone considerations. We already talked about the USB versus the xlr, so we can go ahead and skip on that. Down here though, the dynamic versus condenser, I touched a little bit on it when I talked about my microphone.

My microphone, as you can see, I guess you can't see, but it's a condenser microphone, so it is going to be great and quiet spaces. As I mentioned, if we're talking about visual, it would be 10 80. In terms of quality and we would be picking up some really great sound. Now dynamics. You're also gonna get really great sound.

I don't wanna, it's still gonna be 10 80 p but what you're getting is a different, you're narrowing in on a different frequency set. And so the way it's going to pick up, it's gonna be more forgiving. And that's all I want you to know. When you think about dynamic microphones much more forgiving when you think about condenser microphones.

They're gonna show you out a little bit. Alright, let's take a look. This is my setup. I put this here just to be transparent. I will say I also recently got this and so I put a lot of thought into it. Especially as, my 10 years of experience, I've dealt with a lot of microphones and a lot of different equipment.

This is what I chose. But it might not be what you need. And so this slide right here is about your setup. Not all spaces are created equal. Again, I am not looking to. Take your money by any means. I'm here to just, bridge the gap between audio and the fear of recording. And so please feel free to contact me on LinkedIn.

I also put my email down there as well. If you have any questions about your space, your specific setup, I would love to come on here and say Hey, this is the mic, you need it. Or this is, the audio interface, but I just can't do that in good conscious not knowing your particular setup.

So if you do have questions, you wanna get started in record. That's wonderful. Just contact me online on LinkedIn. Okay. Or email That's. All right. I said anywhere and anywhere. A Laier mic is a mic that can clip easily onto your shirt or whatever you're wearing at that time.

That is going to go ahead and cut down on wind. You're, you, if anything's moving is sound and wind is absolutely moving. And so we need to make sure when we record an outdoor environment that we use different microphones that have d. Strengths, a Laier mic. You'll see your reporters using this.

You'll see this used in film. A lot of people use this for outdoor recording, so a la mic as we refer to it. Really portable, easy to use. If you do go that route, go ahead and get a wireless one. Dynamic. Mike. I told you, incredibly forgiving. Going to be great for recording outdoors. That being said the lab probably gonna be a one person mic situation dynamic.

Mike, you can do two, three, whatever you're looking for, just, you see how it doesn't have that windscreen on there? It's making me nervous. So if you're gonna record outside, just put a windscreen on there. And then the broadcast headset, Mike, I put that on there because I I, as I've maybe mentioned, I've recorded with NCAA basketball teams and hockey teams as well.

And when we're in the stadium, these are the headsets that we're using. We're using the broadcast headset. It's gonna be wired, so you need to be tethered to something for a moment. But that being said, it has an incredible microphone. Again, we're in the stadium, thousands of people screaming, and we're able to put out some really quality audio with this microphone.

Outdoor equipment, those are your considerations. Shotgun microphone. A shotgun microphone is really great for recording more than one person, but with one mic. So you don't have to go out and have, bulky equipment, especially if you don't wanna be carrying around those dynamic mics. And how hey, how are you?

You just want this to be out of the film. Or out of the screen, shotgun mic's gonna be a really great option for you. It's a directional microphone, which means it needs to be pointed at your mouth as you should be doing anyway. They should, gen Mike should generally be pointed at your mouth, but it's really important for a shotgun mic to be pointed directly at your mouth, so you're gonna wanna do that.

A dead cat windscreen pairs really nicely with it. Again, windscreen's really important, but this dead cat, aside from strange name, Can reduce up to 10 to 15 miles per hours of wind. Really important. And then, how do we go ahead and plug all this stuff in? Are you bringing your computer out?

I'm not sure where you're gonna be on location, so maybe you don't have that capacity. A portable recorder is going to be a really great tool for you to use a portable recorder. I'm not sure if you can of see over here, but. It has two microphones externally on top, and then it has two inputs on the bottom down here.

So you can use those two top mics to go ahead and record ambient sound while also plugging in your dynamic mics or whatever you're looking for into those inputs as well. So you can get two, two two dynamic mics set up in there. Or you could use your shotgun mic, whatever. And then you can also have those ambient recordings as well if you wanna infuse those through your product.

All right, this is my very last tab. I don't wanna run through. I don't think I have time to run through all of it. Excuse me. But what I do want to tell you two things. I wanna talk about the double ender because it's a hot topic and it's an important topic. If you're gonna be recording interviews and you're going to, be in your office space, we go ahead.

We connect. Your office space is set up beautifully. We wanna make sure that we take advantage of all the hard work that we've done to capture quality audio. If you're gonna use something like Zoom to record your audio, or you're gonna use your podcast interview or you're gonna use Skype, those record over wifi.

And so there's gonna be drops, just like when we use telephones. There's gonna be a drop. It's not gonna be as. Captured, and so what we can use is a double ender, such as a riverside or a squad cast. What that does is instead of us recording over wifi, it records just my computer, just your computer.

And then we get those files, but there's no over wifi or anything like that is on this computer. My computer only. So using a double ender is going to really allow you to capture quality audio while working remotely, doing whatever on Zoom, et cetera. So I, I don't, I went little bit over but those are the, Main things I wanted to share with you.

If you have any questions on some of these recording tips, please feel free to, take a picture of it or anything like that. But happy to answer any questions here on out.

Awesome. And. Christina, I've got a couple of questions, but first I want to let you know something. So my business partner is Aino and she's got a Boca Broadcast Radio production. She is what I believe the industry refers to as a real audio snob. Okay. And for the entirety of your presentation she has been in our company Slack saying yes.

Yes. This is the way, haven't I told you this for years? Absolute corroboration across the board from the whole team at One Stone Creative. Thank you so much. Oh, thank you. This is great. That's super, super interesting. I really enjoyed this and the way you presented all the information. So a couple of questions I've got here, and one is say if I were to join a call, maybe I'm a guest and I'm getting onto a say it's Zoom, or say it's a double end like Riverside.

And the host I'm talking to says, you don't sound right. What's the first culprit? What's my first thing to troubleshoot? When I realized that my audio does not sound the way it should, what should I check? That's a great question. First and foremost, I, if you're doing something like this, I wanna just make sure we're wearing headphones.

Again, that way we're not getting feedback from. So if I'm not using headphones and I hate to get too visual with it, but that's just how I live. Maybe I'm, it's cuz I'm Italian American. I don't know. But what I will say is If you don't have your headphones on, then the audio's gonna come out of your computer and then again, it's gonna bounce off the walls, it's gonna be bouncing off everything, come right back.

So it's gonna interfere with our audio recording. So that's the first thing I would say is, Hey, are you wearing headphones? The other thing that I would recommend is just making sure. I would ask, first of all what doesn't sound right? That's my first question. Am I too tenny? Is it too basey?

What are you hearing? A lot of reverb. If you're hearing a lot of reverb, then maybe I don't have enough stuff in my room, and that's something that I like to talk about as well, is a great room to record and is gonna be a balanced room. If so, when we think about a room that we're gonna record in, if it's empty, like we've all been in an empty room.

Hello. Echo, like not good. You wanna, when I talk about having material in there that can absorb sound, that's what I'm talking about. So we don't get those echo, it absorbs into that material. I hope that answers your question. I would have follow-ups, I think. But first, make sure I'm wearing headphones.

Perfect. And the next question I've got here is does a microphone or an audio interface have any indications on pitch or reverb for people who are deaf or hard of hearing? Or what could you recommend for someone in that situation who wants to monitor those things? I'm gonna be completely honest with you, Megan.

That is a powerful question. That is an important question, and I truthfully do not have that answer. I apologize and I think that speaks to maybe. Of personal ignorance that I should be, addressing and looking into, just to be quite honest with you. So I'm gonna take that and I'm gonna look into that a little bit deeper.

I thank you for that question. I don't wanna answer if I can't. It's important though. Thank you for bringing that up. No. Fair enough. And I will say to everyone who is watching this now, and in the

recording Christina posts great content, really interesting, valuable, useful content results of research on LinkedIn.

So you should go follow them there. Where I have no doubt that when that answer is discovered, we'll be promoted and shared . Oh, yes, you are correct. No, but truly thank you. I, it could be like a stump moment, but I genuinely, that's a really. A question I apologize. I don't have the answer, but you are correct.

I will get it and I'll answer . I'll be posting it and sharing it. Fantastic. That's what I've got for questions for right now. Christina, thank you so much. This was so interesting. I love the way you presented information. I feel like everyone who's watching this now is really well armed for the different situations that they're going to be finding themselves in recording the podcast, and that's absolutely fantastic.

So yeah, thank you. And if you wanna maybe go back to the slide really quickly where people can get in touch with you. Yes. Yes. We'll put that up for a perfect, a last moment or while you I like yeah. Christina, can I just say I've been doing this 10 years and I learned more today than I have in all of those 10 years, so thank you.

Thank you so much. Truly that means a lot from you, Tom Megan, from you as well, and the one stone creative team. As much as I've been doing this for 10 years I'm a human being, so I, I just wanna make sure I relay information properly and I thank you for giving me the space to be able to.

Absolutely marvelous. I've had a great time. So this was our last official presentation of the Podcasting for Business Conference. It has been an amazing ride. Tomorrow we do have some extra cool bonus stuff In the morning at nine 30, there's going to be a deep dive interview into this year's state of business podcasting report, which was released just two days ago.

That's gonna be fun and some workshops. So for everyone watching this now or watching this in the future, thank you for being here and I'm so excited to see around the recordings area and elsewhere. Thank you everyone.