

Speaker 0 00:00:00 Yo CEO, telco, CEO. It's time to rethink everything, you know, CEO. Yeah. The world is going digital. The cloud is going to bridge it all for relevance. You elephants have gotta be less rigid. Y'all so CEO, go, go CEO in the future. It's the fast that eat the slow don't you know? Oh, you gotta be prepared. There are challenges of plenty. So pull up a chair. This is Telco in 20

Speaker 1 00:00:18 Danielle Royston and this is Telco in 20.

Speaker 1 00:00:31 Welcome to Telco in 20, I'm Danielle Royston. You can call me DR. I am so excited about this episode. Forrest Brazil is our guest and also this episode's resident rap master. He's a total badass and completely awesome. This episode is part of a three-part series called liftoff. Hopefully you listened to my last episode with Troy O'Brien, which was how to take a large IT estate and start moving it to the public cloud.

Today, we're going to talk about what happens next. Forrest wrote an article for A Cloud Guru that I totally love called the lift and shift shot clock. A shot clock is a great analogy because I think a lift and shift migration is just a ticking time bomb - you're in the game, which is great. But if you don't use your time wisely and squander the opportunity, you're totally hosed. So, I wanted to talk with Forrest about the problems of lifting.

Speaker 1 00:01:22 Let's take 20.

Speaker 1 00:01:24 So let me introduce Forrest. He is an AWS serverless hero. He worked at an enterprise software company named Infor, where he helped them transition from on-premise installations to building a SAS platform on AWS, which is very similar to what I was trying to do at Optiva. There are tons of videos of him on YouTube. He's singing, he's drawing. He is a cloud architect, writer, speaker, and cartoonist. Hello, but that leaves off one impressive thing. He's also an author. His book is called the read aloud cloud and it's available. Wherever books are sold. Our guest today is Forrest Brazil.

Speaker 0 00:02:01 Okay, thanks so much, Danielle. It's great to be here on the show.

Speaker 1 00:02:04 I cyberstalked you in order to get ready for our chat. I found out you're a rapper too, and I challenged you to cloud rap battle that we're going to do at the end of our interview, which is crazy and super fun.

Speaker 0 00:02:16 This is going to be interesting for sure. I would not call myself a rapper. I would call myself someone who deliberately humiliates himself, uh, in order to make technical points. And that's kind of how I got started with that. And, and it seems to, it seems to resonate with people. So, I am more than happy to spit ridiculous bars in the service of the cloud.

Speaker 1 00:02:35 That's awesome. So that's a good segue into my very first question, which is like, how are you so cool.

Speaker 0 00:02:40 I realized a few years ago, I really wanted to bring in some of those other aspects of my personality. And I remember it was out in Austin, Texas speaking at serverless con. Um, and I decided to end that talk with a rap, uh, just like a spoken word rap, but nobody knew who I was. Um, but that's honestly one of the best things I've ever done for my career.

Speaker 1 00:03:01 Now we don't know each other at all. This is the first time we've ever really spoken. Um, I found you because I follow a guy by the name of Corey Quinn @QuinnyPig on Twitter. He's hilarious. And he retweeted an essay. You wrote it was called the lift and shift shot clock. And I loved it because what I've been doing in my work, um, I was the CEO of a publicly traded company in Canada that was attempting to pivot our software from on premise old school, bare metal, to being a cloud native, the whole idea that it's a ticking time bomb when people move their stuff to the public cloud, let's start there. And why do people lift and shift in the first place?

Speaker 0 00:03:45 So many reasons why that makes sense as your first step into the cloud. I mean, even leaving aside the fact that you may have a data center that's on fire or servers that are haunted, at least that's expiring, right, where you have to get out now and who cares about what it looks like. And, and leaving aside, you may have applications that you don't control. Like you might be running SAP or something and you don't really have the option to rearchitect it, right? So, there's all kinds of considerations. People have that are totally separate from whether or not they're going to rearchitect to a cloud native model, even besides that there's reasons to lift and shift. I mean, if I have a whole bunch of people on my team, who've been running on premise applications for 10, 15, maybe even 20 years, I'm not going to be able to flick a switch and turn them all into cloud experts overnight.

Speaker 0 00:04:30 And it might be a good idea for me to go and get my feet wet gradually in the cloud, by running an Amelia that I'm halfway familiar with, right? Let my ops team figure that out a little bit. I might want to do some of what we sometimes call financial engineering where I say I'd like to figure out exactly what I'm spending on infrastructure that was so obscured in the data center, because I had these CapEx things and I was making commitments totally 18 months, two years out. Maybe I'm going to take these servers, I'm going to lift and shift them into the cloud. And now at least I can start to get a little bit better sense of how my usage is tied to my cost. Now I can take that back to my finance team and say, Hey, look at how much we're spending on these massive over-provisioned, you know, I dunno, AWS ice series instances. I'd much rather go and run something on containers and match my usage even more closely to what I'm spending. And so, people do that. And I think folks have the right idea. They have the right intent when they take those initial steps. The problem comes as you were saying, when you get to the cloud via lift and shift, and then you stop.

Speaker 1 00:05:29 Yeah. And so, I tend to work with telco companies and they have like probably 500 enterprise, 600 enterprise software applications running in their data centers. Right. I mean, one thing I don't think people really understand about telco is that they're really like 25 years behind the rest of the world. I mean, they're like really, really behind the curve

here. What would you tell people to plan for and do before they, the first button to spin up their first instance?

Speaker 0 00:06:00 That's a great question. So, you know, there's only so much you can do before you actually move. I mean, what's the Mike Tyson quote. Everybody has a plan until they get punched in the mouth. That first server that you move into the cloud is going to be a, a nasty wakeup call potentially. But what I would encourage that you do, you know, don't necessarily spend years and years planning to try to get your cloud migration exactly right before you move to the cloud. That's how you end up with this tire kicking kind of approach where you're a couple years in and you say you've adopted the cloud, but really all you've done is just throw five test servers up into <inaudible>, you know, analysis paralysis. Right. Just exactly. It's exactly what it is. So I would say find some quick wins, but once you've got those initial workloads into the cloud, you've got to think a little bit about, you know, what are the teams going to do that are supporting these applications?

Speaker 0 00:06:51 You've got to find a way to, of course train them so they understand the cloud. So, so you've got to make sure that you've got the operational competency built up around the cloud. So, make sure you've got the training, make sure you've got the ops, what we sometimes called SRE site, reliability engineering, and then third, you want to make sure you've got good governance in place to be clear. These are not points in any particular order. Like they're all important. So, you want to make sure that you can actually charge back, you know, what people are spending. You want to make sure you've got things like tagging. You just, you know, if you continue to run the cloud, like a data center, you're going to find that it's very, very expensive because you're renting servers instead of owning them. And the only way to address that is to understand who's spending what, and then you can start reducing it over time.

Speaker 1 00:07:34 Yeah. It's a whole new area of skills that usually is not developed within these older organizations that haven't really adopted this, this new technology. And so, people get sort of that sticker shock on there.

Speaker 0 00:07:48 Right? I couldn't tell you how many times we, you know, you fast forward two years and the execs are saying, I thought the cloud was supposed to save me money. But if you continue to run with the legacy mindset, that that very quickly will not be true. And now you've just got a new set of legacy procedures and practices that you're paying cloud prices for.

Speaker 1 00:08:06 In your article, you kind of give it about 18 to 24 months.

Speaker 0 00:08:09 And to be clear, like that's not a hard and fast timeline. I mean, people go through this process at all different stages, but I do find that that two-year threshold seems to be remarkably accurate, correct? That's when people's internal clock start going off. And if you're not seeing success, your cloud experts say, you know what? It's been two years. If we haven't made progress by now, we're never going to, I'm going to go take a job across town somewhere where they know what they're doing.

Speaker 1 00:08:30 No, a lot of people don't talk about too much is the HR implications. And I think you've brought it up in two ways, which is the training required to make sure your teams are ready to deal with these new tools. I think your second part about like, okay, we've listed and shifted. It's all this new technology. It's real exciting, but like you're treating the public cloud more like a real estate. It's a place to run things. When you start to get this brain of like your good people start to leave and go work at other organizations that are doing it better, where they can learn.

Speaker 0 00:09:01 I think that's definitely true. I mean, I was always one of these people who thought of myself as quick to learn and I didn't need formalized training. So, I would just go out and Google things and figure it out on my own. Right. But what surprised me to realize is I actually needed training as much as anybody else only. It wasn't for me, it was for the rest of the organization. So, the solution to that is of course, to, you know, push out training and certification to your, to your entire team, but also to take those experts and embed them with the teams and help them to skill up. And then you move on and you embed with a different group.

Speaker 1 00:09:37 The portions of teams, creating those teams, that expertise around pricing and optimizing costs. Yeah.

Speaker 0 00:09:43 And, you know, forget teams, we see entire companies, entire startups that have spun off to handle this problem. You know, people who make it, their life's work like Corey Quinn, who you mentioned earlier, but we do see internal teams that do this. And the discipline is it's called fin ops.

Speaker 1 00:09:55 On top of it. I mean that pricing, I mean, I like to call it the cloud Wars between the hyperscalers. Like they're constantly trying to change the pricing to attract the different people to use their cloud. And so, it changes. And so, what was optimized and efficient six months ago, or a year ago may have changed around dedicated instances or bring her own license or instance sizes and things like that. And so, I think the people who do it really well really are managing their costs and making sure their people are really understanding how that all works. So, I think it's super cool. I love that.

Speaker 0 00:10:26 Yeah. Yeah. And I also say one thing more there, which is, so you want to have people who really do focus on that because they can drive the organizations, uh, you know, seriousness about that issue. Um, but it, to some extent cost optimization becomes everyone's job, especially within the technical organization, but really even beyond to places like finance and places like support. Uh, because as you were just saying, you know, this whole cloud cost conundrum is so ramifying, and it's so complicated. You really want everyone to have in the back of their mind. You know, am I making decisions here that are going to set the company up for success? Uh, financial health wise, when you have the ability to spin up instances and resources, you have the ability to make those changes. You know, to some extent you want to instill in everyone good practices there,

Speaker 1 00:11:10 It has to be controlling the purse strings, or it does become really expensive really quick.

Speaker 0 00:11:15 Yeah, exactly. There's a honeymoon period that ends quickly when that first huge surprise bill lands out of nowhere, it's really the surprises that gets you, right? It's not even the cost. It's not being able to forecast what the cost is going to be.

Speaker 1 00:11:27 Well, we wanted to end on a rap battle. I can't believe I signed myself up to do this because I cannot sing. But anyways, we wanted to go along with your read aloud cloud, um, book. And so, the rules were, the rap had to be about the other person. Um, we agreed to use five words in our rap. These are hard words, cloud legacy, ticktock transformation and buzzer. Those are like the five words. And so, I want to go first, cause there's no way I'm going to follow a Forrest. Mine is set to the tune of, again, I'm old, uh, vanilla ice is ice, ice baby. Alright, so, alright. So, I'm calling it cloud cloud, baby.

Speaker 0 00:12:13 All right. So here we go. Alright.

Speaker 1 00:12:16 Let me clear my throat here. All right. Stop collaborate. And listen. Forrest is super at transformations. His book grabs a hold of me tightly. Read it to my kids daily and nightly. Will it ever stop? Yo, I don't know. Trump and tick tock come into blows to the extreme. He rocks a mic like a Vandal step up on stage and Weiss cloud on a panel. Forrest is a speaker that booms liftin shift is a ticking mushroom. Deadly. When you migrate legacy, anything less than the cloud is a felony. Love it or leave it. You better make way I on the buzzer cloud, won't pay if there's a problem for us, we'll draw it. Check out his book. Well, a DJ were walls it cloud cloud, baby. Come on, come up.

Speaker 0 00:12:56 Oh, that's awesome. You got bars. That's great. All right. So mine is shorter than yours. You, you have definitely vanquished me in terms of the number of, of bars that you've laid down. So, I'm going to have to, uh, see what I can do here. All right. Should we go for it? Go for it, try it. Yeah. Okay. So, it's kind of in triplet field, so let's see if we can get into it. Uh, okay, here we go. She's beaten the buzzer because her perspective is lately a greatly, much needed corrective to legacy apathy, trapping the industry without cloud. They'll never begin to see transformation, innovation. Telcos, Danielle knows our race and stagnation, but not on her watch. She's checking her clock. You're not going digital wealth, tick tock.

Speaker 1 00:13:34 That is awesome. Now that's hard cause he did it fast. Barry Lin, Manuel Miranda of you. That's I mean, can I, I want a printout and I'm going to, I'm going to hang it on my wall.

Speaker 0 00:13:46 I, I will, I will send you whatever that was and you can do with it, whatever you say about that.

Speaker 1 00:13:52 So, thank you Forrest. Um, we're real, like I said, we're super excited about your new book. They'll read, allow cloud, and we wanted to do something really nice for,

for Forrest. And so, we're putting out a little offer for the first a hundred telco people who DM me on Twitter, their company name and shipping address, send it to telco D my DMS are open. I'll send you a free book.

Speaker 0 00:14:17 Yeah, that's awesome. That is amazing.

Speaker 1 00:14:21 Get it going, right? Like I'm sure you're going to sell out. So, dibs on a hundred.

Speaker 0 00:14:27 Folks. You've got to represent here. This is amazing.

Speaker 1 00:14:29 Isn't that super cool. I think it's really cool. So, Forrest, thank you so much for taking the time to talk to me today and for awesome rap battle. I am clearly not Eminem, so I will keep my day job for now hang tight because we're ending each podcast with the Telco in 20 takeaway. I have 20 seconds to tell you about something you need to know. We've been talking with Forrest about refactoring your applications. During Google Cloud Next's on-air conference, Google dropped 57 sessions -- I actually went and counted it -- on how to modernize your applications. The content covered everything from mainframes to games, using ant those super techie stuff and stuff. That's more business focused. Go listen. When you get there, check out the session called accelerating app development and delivery the modern way. I'll be sure to put a link to the talk in the show notes, a huge thanks to Forrest Brazil and thank you to all our listeners. Don't forget to hit that subscribe button, share a podcast with your colleagues and let's connect on LinkedIn and on Twitter at telco dr. Also sign up for email newsletter, a TelcoDR.com that's T E L C O D R.com. We've included that link in our episode resources, and you can text me too at 925-TelcoDR. Later nerds.