



## Architecting the Cloud, part of the On Cloud Podcast

**Mike Kavis, Managing Director, Deloitte Consulting LLP**

**Title:** Using DevOps principles to bring change to the enterprise

**Description:** DevOps. It's development and operations in collaboration. It's IT teamwork at its best, right? Yes, but it's morphing into more than just Dev and Ops. In this episode, Mike Kavis and Comcast Senior Director of Client Entertainment Technology Michael Winslow, talk about how DevOps is moving beyond the cooperation of Dev and Ops to help foster and manage collaboration and change at the enterprise level. Michael gives his perspective on how to implement those changes: start small and apply a team mentality to rolling out those changes and training your people. They also discuss DevOps in the time of COVID and how companies are adapting DevOps to a remote working environment. The pair also talk about Winslow's efforts at increasing diversity in the DevOps--and wider technology--field.

**Duration:** 00:19:04

### Operator

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### Mike Kavis:

Hey, everyone, and welcome back to the Architecting the Cloud Podcast, where we get real about cloud technology. We discuss all the hot topics around cloud computing, but most importantly with the people in the field that do the work every day. I'm Mike Kavis, your host and chief cloud architect over at Deloitte. And today I am joined by Michael Winslow who is the senior director of client entertainment technology at Comcast and a frequent speaker on the DevOps track. So, Michael, great to have you here today. Why don't you tell us a little bit about yourself and what's going on at Comcast?

### Michael Winslow:

Hey, Mike, thanks for having me today – appreciate it. So, I'm Mike Winslow, like you said, senior director client entertainment technologies, and what we do at Comcast in my organization is we create a lot of the client experiences that go along with our X1 experience. For anybody who's familiar with our X1

experience, which is our basic cable experience, we create the companion application called Stream. So, if you want to view a viewing experience on your phone or other tablet device, you'd be using Stream, rather than our X1 device. And, so, I'm in charge of the teams that kind of build out that experience.

**Mike Kavis:**

That's cool. Next time I'm watching a movie, I know who's doing all the work behind the scenes, so thanks for that.

**Michael Winslow:**

*[Laughter]* Well, you don't know everybody that's doing all the work. We've got a huge, great team.

**Mike Kavis:**

I can imagine, yeah. I've seen you talk a few times and you mention in one of your talks you don't like the term DevOps and prefer to use the CAMS acronym, so let's talk about that.

**Michael Winslow:**

Yeah, absolutely. I like DevOps as a banner, like if you're really trying to get the point across fast because more people know the term and understand it. But inherently I think the term DevOps makes you think development and operations, and it's a little bit of an exclusive feeling, so much so that I think that, like, security people came along and said, "Well, why don't we call it DevSecOps?" And if you think about it, all the people that are involved, if you expanded that out you'd have the longest word ever, right? But CAMS is an acronym, and I think it was coined by two people that were on your show, Damon Edwards and John Willis, that I think perfectly speaks to what I believe in in DevOps.

So, it stands for culture, automation, measurement, and sharing, right? And if you really abstract it out to that level and you think about it, it's the idea of automation – everybody thinks about that with DevOps, moving faster improving quality, things of that nature. But then when you add the measurement thing in, that's where a lot of people miss out, the idea that you need to measure how you were performing before versus how you perform after you've made a change. I think one of the greatest sayings around that is you don't know if you're winning if you don't keep score. And, so, I do believe that those letters espouse what I believe in DevOps a lot more so than the word DevOps itself.

**Mike Kavis:**

Yeah, so let's talk about the measurement part, because I've seen people go down a rathole and measure everything under the sun. And, so, what's the balance there? What are typical things that measure success in a DevOps journey and what are those ones you should probably stay away from?

**Michael Winslow:**

Sure, and when you think about the idea of the DevOps journey being a holistic one, right, don't just start measuring whatever's in front of you. Many times, in larger organizations, the teams that you work with will have things like OKRs or KPIs, things that they really find valuable. And, so, you start with that. You know, if you're working in an environment where teams know exactly what they think success is, make sure that you have the ability to measure those things. When you're working with a well-defined framework in the DevOps arena like SRE, which is right there in the arena, they've come up with ideas around SLOs, SLIs, error budgets. Those are all great things to focus in on and say, "Well, if we're going to truly start implementing error budgets, then we'd better very well know what an error is defined as with every team that you work with," because you don't want to start punishing people with error budgets when it's not even really errors that are happening, you know?

**Mike Kavis:**

Yeah, I work with a client in a financial institution that was on a long journey and it was hard because they're very conservative. But they had key metrics they posted on these big posters in the large conference room where a lot of people met, and there were a couple that stood out. And there was one which was Deploys Per Day, and it was a fairly big number. And this was a company that, when they started their journey a couple years earlier, they were talking about quarterly releases. And I've been in and out of that place for probably 18 months and it hit me one day. I walked in there and I see this 22 deployments per day, and I was like, "Wow." You know, they still had a long ways to go, but talk about a motivator, right, to see that your company can do this. I thought that was an impressive metric right there.

**Michael Winslow:**

I agree completely. If you talk to a lot of well-established software development groups, a lot of times they'll think that that's not a good metric to measure. And I disagree completely being on teams where deployment becomes almost a non-issue; it just happens. I spoke at one conference and I showed the picture. I was on a team where we had a button that was right next to the water cooler that you could push it anytime, and if you pushed that, it triggered a deployment. We were that secure, that we knew that our for this particular application weren't affecting our customers, that you could deploy anytime and not worry about it having an effect on our customers.

**Mike Kavis:**

That's pretty cool. Did you put the easy button on it?

**Michael Winslow:**

Put the easy button on it, yeah. *[Laughter]* People really stressed it, too.

**Mike Kavis:**

Well, that's a cool example. So, the next topic – you know, going through all your content over the years, I noticed you've been through a number of transformations adopting microservices, DevOps, cloud. So, what are some of those lessons learned? Regardless of the technology there's got to be some common themes there. So, what are the things that give you success and what are those things that block you from success in these hard transformations?

**Michael Winslow:**

Sure. What I've found is there's two major types of transformations that I've been a part of: transformation in regards to process and transformation in regards to structure. And the structure one deals with possibly moving from monoliths to microservices. So, the big lessons learned in these is that you want to, if you can, start small. You know that change needs to be made, you know that transformation needs to be made, but going up to senior leaders who

have tons on the line for making sure that the business runs smoothly, and saying, "I want to transform everything about this organization," you're not going to meet a great deal of happiness there. Instead you control what you can.

You have a team and you want to be demonstrative in the fact that we're adopting DevOps practices, for example, and we've measured how we were performing yesterday, and look at how we're starting to improve every day on how we're able to release software, how we're able to improve quality, fix defects, anything that's found important. And once you can really make your work measurable, make your work visible, I should say, then all of a sudden people start turning their head to you when there's the next time something needs to go through a mini-transformation.

So, I think to answer the original question, I rarely see big bang transformations that truly work in that fashion. It's usually a lot of, "Let's improve small things and keep growing and growing outward, in that direction."

**Mike Kavis:**

Yeah, I agree with that. The only exception is sometimes the change is top-down so there's a large investment, but even that's pretty hard. But, typically, what I see is a group that has a product that's very customer-facing recognizes they need to move faster, make those changes, have success, and then more products within the company say, "Hey, I want some of that." And it kind of grows organically like that.

**Michael Winslow:**

And those are the two concepts – I know everybody talks about kaizen all the time, which is incremental improvement. But there's also a concept out of that same camp called kaikaku if you've heard about that, which is blow up everything and start over. So, that's one that people don't talk about as much but it definitely happens.

**Mike Kavis:**

So, next topic – this is something I've seen you guys leverage a lot and it's a topic I like a lot, are dojos. So, you leverage dojos to improve collaboration and learning across your organization and you have a specific use case I think I saw – maybe it was a DevOps Summit a year or two ago – where you had an international partner and you started doing dojos to kind of cross-train them. So, talk a little bit about that.

**Michael Winslow:**

Yeah, sure. You know, just a small change in verbiage there – we certainly didn't cross-train our friends over at Sky. We just collaborated on a shared topic, and I'll go into that. I think this fits perfectly into what we were saying about changing small things instead of big bang. When we became family with Sky in 2018, there were a lot of pockets at Comcast and at Sky that would reach across the pond to say, "How can we work together? How similar are our groups? You know, where are there synergies here?" And where our team – my team was in charge of managing the DNS infrastructure at Comcast – I should say specifically we were in charge of the software that helped manage the DNS infrastructure.

And what we always knew about our software – which is called VinyIDNS and it's open-sourced. What we knew was that we had a niche group of possible customers with our software, and it was people who managed and maintained very large footprints in DNS. So, if you think about it, there's only a handful or a dozen folks that could truly take advantage of the software that we created since we have one of the largest DNS footprints in the world. Well, lo and behold we're not working with Sky, who also a very large DNS footprint. So, that was where we said, "Let's see how we can work together."

And what we found was, being across the river and having competing priorities, it was very difficult to work together sparsely and intermittently. So, we decided let's try out this dojo model even across the sea. And, so, basically for those who don't know what the dojo model is – we're pretty far down the hole here – it's an upscaling program that concentrates on basically making sure that the participants in the dojo learn at the same time as delivering real work and real value. And, so, we came up with an idea of the outcomes that we wanted out of a one-week dojo, and once we figured that out, we sat down, and by the end of the week our outcome was we wanted to stand up our software in a cloud environment that can be accessed by the Sky folks so that the people that were in the room with us could shop this solution around Sky. And, so, they did that and they shopped it around and now Sky actually uses VinyIDNS in some parts for their DNS management.

**Mike Kavis:**

Yeah, that's the part about dojos I like, because we get training but a lot of times we don't get to apply it to the real world. And that's what's cool about dojos. You're getting trained and applying it on your current sprint of work, which I think is a really cool concept. The question I have is did they come to the States and get in a room with you and do that, or were you doing that across the pond?

**Michael Winslow:**

So, during the dojo effort they did not come to the States. We were able to do that across the pond, which was really interesting. And, so, part of the process of putting a dojo together is coming up with this thing called a charter. You know, you agree upon certain aspects of how your teams are going to work together. So, in that charter we talked about hours where we were actually – on the States side we were getting up a little bit earlier in the morning to accommodate them, and then they worked a little bit later than they normally would so that we could get a good window of time to work together.

**Mike Kavis:**

Cool. The reason why I asked that is because my next question is a work from home. You know, how has work from home changed the way your team's approach getting work done? Because I know in a lot of shops who practice DevOps and agile, they co-locate people and work really close in collaboration. Well, that's kind of been taken away from us for about a year, so how has that or has that changed the way your team approached getting work done?

**Michael Winslow:**

Sure. I mean, I don't think anybody came out of this untouched and, so, there have been changes. But the interesting thing was that even before the pandemic, the teams that we worked in in my area of Comcast had a lot of people who worked full-time from home. And, so, we had already established certain practices that made things more collaborative for them based on the feedback that they gave. For instance, they would complain – you know, I don't think that's too harsh of a word, but they would complain and we listened, when we would have meetings in large conference rooms, and then they would be participating through some sort of remote fashion. And there would be side conversations, there'd be mumbling there'd be parts of time when they just had no idea what we were talking about. And, so, our particular group at the time, software strategy and transformation, took on a concept of if one person

in the meeting is working from home, we're all working from home. And, so, we would take those calls from our desks, even if we were inside the Comcast Technology Center.

**Mike Kavis:**

Cool. So, it wasn't much of a change from the meeting standpoint. I'm sure there were other changes, but that's pretty cool. So, the last question – you know, we are in the middle of Black History Month and I know you've been a champion for Black engineers and I don't know if it's called a group or what it is, but you talk about BENGINEERS a lot. I've seen you talk about it onstage as well. Why don't you tell us a little bit about what BENGINEERS is and the work you're doing in that space?

**Michael Winslow:**

Yeah, absolutely – excited to talk about it. So, in 2017 a colleague of mine, Mumin Ransom, started a group called the BENGINEERS at a Lab Week that we have in Comcast. And what it was intended for was specifically the Black technology folks at Comcast. And, so, that was something that we felt as if had enough of a following and we needed to come together and commune. And, so, this was far before I got involved. And, so, basically what we do is we make sure that we are champions for the acceleration of Black professionals in Comcast as well as the pipeline that comes into Comcast. And our approach is one that we create and sponsor a lot of programs in the BENGINEERS group that are intended for Comcast as a whole, okay? So, we understand that we want to give back to the Comcast community in a way that leaders are happy to support us in any way that we need.

So, it's a very symbiotic relationship. And I can't tell you how much support we've gotten from the leadership at Comcast. Just one thing, like last year we had our first all-Black internal tech conference at Comcast, and we've got so much feedback from the people who attended on how great and interesting it was to go to a tech conference and see these particular faces onstage. It was almost like a complete reversal of what you see at a lot of tech conferences -- the ones that aren't concentrating too much on diversity or as much as they can. It was great to see that kind of completely flipped and it's a source of pride for us.

**Mike Kavis:**

That's awesome. And do you assist with recruiting and getting talent as well?

**Michael Winslow:**

Yeah, absolutely. The pipeline is a big part of how we help Comcast as a whole. So, there's a couple of different ways that we've worked with talent acquisition at Comcast. Once, we provide Black engineers to work booths at tech conferences with the talent acquisition folks, so that is a very successful way that we contribute to that. And then the other way is we provide Black engineers to be part of diverse interview panels. So, when new employees are coming in, no matter what their race or gender is we provide people to be on those interview panels so that people can feel like it's an inclusive environment to come work at Comcast, and it truly is an inclusive environment. And there's always more work to be done, but we're definitely moving in the right direction.

**Mike Kavis:**

That's awesome, and I commend you and your team on that. That's pretty awesome stuff. So, that's our talk for today. Mike, great to have you on. Where can we find some of your content? I know you've got presentations and YouTube videos out there. You've spoken at a lot of conferences. Where can we find this great content of yours?

**Michael Winslow:**

Yeah, great. So, most of it I post right on LinkedIn, so MichaelSWinslow is my tag on LinkedIn. I'm also pretty active on Twitter. And, Mike, you have certainly inspired me. It's time for me to finally go out and get myself my own website there, so be on the lookout for that soon.

**Mike Kavis:**

Yeah, I think it was a tweet about my daughter created my website. *[Laughter]*

**Michael Winslow:**

That's right. *[Laughter]*

**Mike Kavis:**

Yep, pretty awesome. All right, well, that's it for our show today, Architecting the Cloud with Michael Winslow of Comcast. To learn more about Deloitte or read today's show notes, head over to [www.DeloitteCloudPodcast.com](http://www.DeloitteCloudPodcast.com) where you can find more podcasts by me and my colleague David Linthicum just by searching for Deloitte On Cloud Podcast on iTunes or wherever you get your podcasts. Again, I'm your host Mike Kavis. You can reach me directly, [MKavis@Deloitte.com](mailto:MKavis@Deloitte.com). You can always find me on Twitter: @MadGreek65. Thanks for listening. We'll see you next time on Architecting the Cloud.

**Operator:**

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