

Episode 28
Talking Public Cloud with GSMA
Released October 19, 2021

Danielle Royston 00:00:03

You may have heard we're taking the show on the road and coming to you from London. I'm Danielle Royston. And this is Telco in 20.

Is it me, or has telco gotten a lot more cloudy lately? I like to think that TelcoDR's CLOUD CITY has had something to do with it. Everyone is still talking about what we did at MWC 21 in Barcelona. We rocked the industry and woke everyone up to the movement that's underfoot: telcos' move to the public cloud. At the show, I had the opportunity to meet with a bunch of telco execs, some old, some new. One new person I met with was Mats Granryd, the director general of the GSMA. We had a great conversation in Barcelona all about the public cloud. Mats asked me some really interesting questions about cloud security and data privacy that I think a lot of other telco execs still have lingering in their minds, too. So when I got home from Barcelona, I emailed Mats and asked him if he was up for recreating our conversation for the podcast. And he said, "Let's do it." So I jumped on a plane, and here I am, in the good old UK! Today, we're coming to you from The Shard, right in the heart of London. The building is an iconic 72-storey skyscraper made completely of glass, and our view across the city is incredible. For this special episode, we rolled the cameras and captured the interview on video, which you can find in our show notes. It's time to get down to business and talk about the public cloud with Mats. So let's take 20.

Danielle Royston 00:02:00

Mats Granryd is the director general of the GSMA. Welcome, Mats.

Mats Granryd 00:02:04

Thank you very much. This is great to be here.

Danielle Royston 00:02:07

It's so great to be here. I mean, we're at The Shard, which is in the middle of London, and we're super psyched to be able to do this in person.

Mats Granryd 00:02:14

It's fantastic. And thank you for coming over.

Danielle Royston 00:02:18

I of course loved everything about MWC 21 in Barcelona. It was a smashing success and I think a real testament to your team. That must have been really hard, with all that uncertainty. Would we be able to do it? And so kind of coming off of that, how has that been for you guys?

Mats Granryd 00:02:34

It's been really, really good. And I think the hard bit was actually in February, March, when we were sort of fighting 'the demons', if you would like, and there were a lot of people saying that you can't keep it, you can't do it, it's going to be unsafe. But we pulled through. And I think that's testimony to the team, as you said, but also shows leadership that the industry wants to come back together and create more business. So that's what MWC is all about.

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Danielle Royston 00:02:59

Right. So how are you kind of taking that momentum from Barcelona and carrying it into the next show, which is MWC LA?

Mats Granryd 00:03:06

Yeah. So obviously if we just take two seconds on Barcelona, a normal year, we would be a hundred thousand people or thereabouts. This year we had 20,000, but with a phenomenal reach. So we reached a hundred thousand individuals every day. And with the syndicate networks, I think we reached more than a million people, which is fantastic. Now we're doing the same thing in LA where we are anticipating half to a third of what it would normally be like, but that's still good, but we see for 22 in Barcelona, in February, great interest. We're really excited and psyched about it. And I think the industry is cheering us on to keep it. I think everyone's ready to come down.

Danielle Royston 00:03:43

Mats Granryd 00:03:44

And I thank you, DR, for making 21 such a success. I mean, it was great to see the amount of enthusiasm, the energy and the willpower of actually creating something. So thank you.

Danielle Royston 00:03:57

Yeah, it was an amazing opportunity for me and my team. You know, this bad event of a big vendor canceling and us being able to execute on the opportunity was a once in a lifetime kind of thing and we maximized it. Yeah, it was crazy fun. So what we did at MWC 21 was we created CLOUD CITY. And that was all about messaging, about moving the telco industry to the public cloud. I think that opened up the opportunity for me and you to meet for the first time. And when we did that, you asked me some great questions about the public cloud. And I think a lot of telco execs are curious about as well. And that's what the Telco in 20 podcast is all about, right? Helping telco execs navigate this megatrend that's coming to our industry. So, I thought we could turn our conversation that we had into a podcast. And so we're going to turn the tables, and for this episode, you're going to ask me questions about the public cloud. So, are you ready to take over?

Mats Granryd 00:04:55

Fantastic, oh I am so ready. More importantly, are you ready?

Danielle Royston 00:04:59

I'm ready. So I guess let's dive in!

Mats Granryd 00:05:01

Okay. Very good. You know in the telco industry, we're starting to understand the cloud. And we have been having several discussions around it. But you know there are so many different types of clouds. What is the difference between private cloud, hybrid cloud, multi-cloud, public cloud? When you talk about public cloud, what exactly is that?

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Danielle Royston 00:05:22

With an idea like this, it's so big, there's a lot of language out there. And so just to define it, I think “private cloud” — I sometimes refer to it as “fake cloud” — is maybe using certain technology within your own data center that you're managing, that you've constructed, right? You're buying the machines, your team is managing. And I'll put that strong contrast with public cloud, which isn't just the public internet. But really what I mean there is the data centers that are provided; the infrastructure that's provided by Amazon Web Services (AWS), Microsoft Azure, and Google Cloud Platform. And these are mega datacenters. They have built into it resiliency and failover, and usually, almost always, you're paying by the use, by the API call, or the machine, or the row of storage. That's just so different than the mentality that we have, at least in telco, with owning our own data centers.

Danielle Royston 00:06:16

And so with hybrid and multi-cloud, they kind of like.. riff off of those ideas. So what *hybrid* is, is really a mixture of the two, right? You might put some workloads, I'll say, on the ground in the private cloud, and then maybe use a database in the public cloud, then kind of stitching these things together. And then *multicloud*, it, a lot of times, means using maybe different hyperscalers and hedging your bets, right? You're not going to put all your eggs in one basket — some work with AWS and others with Azure. And you're starting to see some of the big telcos do this.

Mats Granryd 00:06:46

So you can actually have a *multi-hybrid* cloud, putting some of my stuff in my own cloud, and then use AWS —

Danielle Royston 00:06:53

It's not either-or... I think historically it's been all on-premise, in your own data centers. And now, I think, really, the opportunity to start to leverage some of that new technology that's available for public cloud vendors can really accelerate feature velocity and experimentation. And so with these monetization ideas, you don't have to build the whole thing and then test it. You can start to experiment with small groups of your subscribers and if it catches on, expand and expand, and the hyperscalers will enable...

Mats Granryd 00:07:22

I'm sure there's benefits and drawbacks by using the public cloud or the private cloud, right? Or a combination of the two.

Danielle Royston 00:07:30

And that was what my MWC keynote was all about. I did this crazy keynote! Thank you so much for that opportunity. There was this great article that a telco exec wrote that was like, are we going to let the dragons — and the dragons in this case was the public cloud — into the castle? And the castle was the telco. And my message was all about ‘there's two sides to the public cloud’. Right? So yeah, I think there's pros and cons too. I don't think it's like a clear cut winner, but I think that the good far outweighs the bad.

Mats Granryd 00:07:58

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I guess then I think you've answered the question around what is the difference really between a public cloud and a telco data center.

Danielle Royston 00:08:09

You know, I'm always talking to telco execs around the world and you kind of see different attitudes about the cloud in different parts of the world. The attitudes are still kind of evolving, but I think a lot of people get hung up on, 'I can't because...'. 'I can't because of data regulation', 'I can't because there's no hyperscaler in my country'.

Mats Granryd 00:08:28

Okay. That's good to establish that, because then you have the issue of security and safety.

Danielle Royston 00:08:34

I'm always like 'you guys gotta understand'... and really, a 30 minute conversation with a hyperscaler team will help people understand. I usually just line up telco execs with the hyperscalers directly. It's not even me. I'm like, 'just tell them how you guys do security at one of your regions'. It's a highly secretive location. There's five layers. There's biometrics, there's electronic, automatic logging, right? They won't access your data, and you can ask for a log at any point. Contractual reasons that they can't access your data. And so I just spend 30 minutes, and Google explains they spend \$3 billion a year on security, and execs are like, 'okay, our data centers are not even close to this'. And that's just the physical structure. Then you get into all the other things like the databases that they can offer.

Mats Granryd 00:09:18

...and I guess redundancy as well. And making sure that...

Danielle Royston 00:09:20

All built-in for you, and it's on their capex done!

Mats Granryd 00:09:23

...so the data center analogy, that would be more towards a private cloud. Would you say that's the same thing?

Danielle Royston 00:09:31

Well, in your own data center, you're responsible for all of that.

Mats Granryd 00:09:34

And you take responsibility for it if you have a fire, or if there is a breach of cybersecurity perspective, or something like that, that's your problem. It's not the public or the hyperscalers' problem. But if you look at Europe, there is a movement, as you might know, around Gaia X. How would you see that? Is that sort of a competitor to hyperscalers, or to the three main hyperscalers?

Danielle Royston 00:09:56

Yeah, I think it's gonna be really hard for Gaia X to compete with what these guys are doing.

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Mats Granryd 00:10:01

They're a little bit late to the party.

Danielle Royston 00:10:04

Super late to the game, I think the industry body coming together and agreeing just adds time, right? It just takes a long time for lots of members to come to an agreement. Versus if you look at a private company like Amazon that's publishing APIs and new ideas just all the time. It's just... the speed. It's just really hard. The hyperscalers have been doing this since 2006; at least Azure and AWS. Google Cloud was a little bit later. But what they're offering is stuff that they've been using since the nineties to run their own businesses, they just made it commercially available. These guys run the internet. Google downloads a copy of the internet every single day and saves it, right? Like, if something happened to the internet.. Google has a copy of yesterday's internet, so we can roll it out. So for Gaia X... I think there's a lot of initiatives out there of 'let's do a sovereign cloud'. 'Let's do a special European-focused cloud'. People sort of start with this 'Oh, it's all about the infrastructure'. *Where are the machines located? Where's the data located?* But I think what they're really missing — And that's the big difference in awesomeness about the public cloud is that the public cloud vendors are offering so much software that you can't get anywhere else. Machine Learning, AI, analytics, databases.. Amazon's building their own chips that are cheaper, faster than what you can get in an Intel box.

Mats Granryd 00:11:23

But if you want to be a little bit cynical here, I mean, there are three hyperscalers. They are all in it for the money, right? They were using it previously themselves, and now they make it public. There's huge funds. They're really fast when it comes to launching a new software and new features, et cetera. But me as a consumer, or me as a company, being somewhere, as an enterprise, somewhere outside of the U S am I supposed to be a little bit concerned about that? I mean, Gaia X would then be, 'yes, it's a little bit slower, but it's at least run or governed by a big body that makes sure that it's neutral and it doesn't capitalize on the data', all of that. And then you have the Cloud Act coming into this as well. How does one reconcile all these things? Because I can clearly see the benefits, but you can also see potentially that there is a drawback.

Danielle Royston 00:12:15

...That this is the two sides of the public cloud, right? This is all about my keynote, which is you've got to make these trade-offs of.. let's say your competitor doesn't have as much concern as you do. Let's say you're a very risk-averse organization or enterprise. You're scared that these are American companies. You don't know how to navigate it, or you're unsure, but your competitor decides to go all in. So you're like, 'well, I'm going to go Gaia X, I'm going to go a little bit slower'. 'I'm going to give up some of the tools that they provide', but your next competitor doesn't and goes all in, and is reducing their CapEx and reducing their OpEx. And it's putting out new features to market, and starts swapping subscribers because they do trust it. And again, I don't think it's one or the other, right? I think every organization has to make this decision on their own. But what would happen from a commercial perspective? Your own capabilities are not as fast as your next competitor, and you start losing subscribers. I think you're kind of stuck. And you're like, I got to use the public cloud, right? I got to use these vendors because it just gives you so much capabilities. And keep an eye on, like, maybe give Gaia X time and later hedge your bets. But I think it comes down to —

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Mats Granryd 00:13:22

So you mean that there will be a trade off, that me as an enterprise, I see my competitors going with hyperscalers and getting advantages, then I will then be de facto forced to use them. That doesn't sound like a very compelling picture, to be honest.

Danielle Royston 00:13:36

I don't think you can stop the public cloud from coming. I mean, look at what DISH is doing in the United States. The Greenfield network and OpenRAN, and they're putting their core on AWS. They're putting AWS at the edge. Now, they need to execute. I think execution obviously is a big, big piece of this. And if they can't put this altogether, but let's say that they do, it changes the economics in the United States. And so AT&T and Verizon, they need to keep an eye on this guy and what they're doing. And I think take it in another country. You know, Vodafone has been very progressive with the public cloud. They're using Wavelength, which is AWS at the edge. They're using Google Cloud for analytics. You've got them really excited about using open APIs to turn their functionality into smaller and smaller modular pieces.

Danielle Royston 00:14:24

I think Vodafone's really trying to change the speed of business. And so your competitor Vodafone, you got to keep an eye on them, right? Deutsche Telekom decommissioned 77 data centers. Right? They're moving to AWS. And so, yes, I think there's some concerns, geopolitical, GDPR regulations. Can I do it in this country versus that country? I think you need to weigh all that, but then there's also the commercial benefits. You know, the reason why I have this podcast is because it is a senior leadership conversation. This isn't a random technical person that's a middle layer manager in a telco that says, 'Hey, I'm going to use AWS today'. No. It is a CEO conversation of like, 'I am willing to take some risks to get some business profit.

Mats Granryd 00:15:09

Exactly. And I think this is really exciting. It's sort of like AI and ethics where we discuss this all the time and we have tools to deal with it, but nothing is really perfect. So the debate is almost the most important thing to have. And I think this might be one of those areas as well, that we're actually pushing the frontier as we speak. And therefore, the discussion needs to be there. The debate needs to be there. Because I can fully understand the competitive pressure, don't misunderstand me. I can absolutely do that, but I can also see other enterprises being much more reluctant to, 'you know what, I can't do it'.

Danielle Royston 00:15:42

Well, but then you look at where the competition's really coming from. And it's not really necessarily the next guy, but rather the OTT vendors that are siphoning your ARPU.

Mats Granryd 00:15:46

Absolutely. Oh my god, you tell me.

Danielle Royston 00:15:42

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It's just, you know, it's just falling off. Right? I don't need to tell the telco execs how bad that's been.

Mats Granryd 00:15:59

I agree with you 100% there. But the hyperscalers... to get the service, do I need to be in the same country as the hyperscalers to use their platform? Or can I be anywhere?

Danielle Royston 00:16:08

I talked to an executive down in Bolivia who was like, 'I don't think I can use the hyperscalers cause they're not in Bolivia. Last time I checked, everyone's plans on data centers – Bolivia was not next, unfortunately.' And he's like, 'Therefore, I want to do a cloud offering for my enterprise customers as a telco, I'm going to build my own cloud'. And so the answer to your question is 'no, they don't have to be in your country'. So from a data regulation perspective, most countries have relationships with other countries that they're friendly with. It's not necessarily the United States, but it could be Germany, and it could be Switzerland. And so usually the overlap of what we'll call white-listed countries that you can share data with and the locations of hyperscalers, there's some intersection of a country that has a hyperscaler you can use.

Danielle Royston 00:16:52

So that's number one, and I always encourage people to check that. I think number two, the hyperscalers have offerings where they will literally stand up a rack in your data center — the data center that you already built — they will bring machines and a rack, power it. And now it's almost like a plug to the public cloud, right? You can use the services of AWS in your own data center. And so for super risk-averse people, this is under your roof, but kind of getting some of those assets. Now it's not a hundred percent. It's not going to be as cheap as it could be, but it's a good way to start if you're really risk-averse, start playing.

Mats Granryd 00:17:26

And that will be the hybrid cloud then, yeah?

Danielle Royston 00:17:29

It would be AWS literally in your data center.

Mats Granryd 00:17:30

The hybrid type of thing that we said, that we started talking about.

Danielle Royston 00:17:34

Right. Azure has a similar offering where they provide the machines and they manage the rack for you. Right. And then Google doesn't provide the hardware, but they have something called Anthos that you can install in your data center. Think of it as like a wire into a public cloud, but it's in your data center. Now, again, it's not going to be all the services. It's not going to be the cheapest way to do that. Right? So some of the benefits I talk about, but it's a good way to start experimenting.

Mats Granryd 00:18:00

Right? You would see some benefits. I'm sure.

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Danielle Royston 00:18:03

My Bolivia friend, I was like, don't build it, just put in a bunch of outpost racks, and it's in your country. It's there, you get the access. I don't know what he ended up doing, but that would be my recommendation.

Mats Granryd 00:18:14

That's pretty cool actually, to do that hybrid, multilayered approach to get to know the technique. Now you mentioned DISH and AWS, I think. I'm a little bit curious to have some real life examples. I think Verizon is working with AWS as well. DISH is working with them. AT&T, I think, is working with Azure, with Microsoft. Could you give me some examples of sort of, what are they actually doing?

Danielle Royston 00:18:38

There's great examples going on. Let's just talk about Telstra for a second, where they just put out their shareholder letter. That 90% of their workloads will be running in a public cloud by 2025. Is that Andrew Penn? Andrew Penn. Right. So that's Andrew Penn communicating both to his shareholders and investors, but also to his people, like I'm putting a stake in the ground that we're going to really change the way we work. And so for them and they talk about it, we need to go hire people with this talent. We need to upskill the people we have. And so that is a cultural shift that they're willing to make. They're just sort of like calling the ball. They're like Babe Ruth pointing into the stands where they're going to hit the ball. But I think that shows real big leadership. We talked about DISH. This is the biggest example of going all in on the public cloud that I know of in the world

Mats Granryd 00:19:23

Virtualizing the whole shebang.

Danielle Royston 00:19:26

It's cloudifying the whole thing. AT&T recently sold their "network cloud" to Azure. I think that's both the IP and the people saying, we're going to start to use Azure at the edge. You guys can do it better than us. We want to focus on our business. Right? We wanna focus on providing value. And I think people out there are saying, oh, you're giving up on your ability to innovate. I'm like the innovation is not in managing the stack. Innovation is in the business value you're providing to your subscribers. I mentioned Vodafone. Vodafone is testing out Wavelength here in London, and they have their big analytics project with GCP, their analytics jobs used to take days, weeks to run and now they're running them in hours and they can run more of them and they can use the capacity of the public.

Mats Granryd 00:20:13

Yeah. That's certainly a huge amount of power in assembling so much data.

Danielle Royston 00:20:17

Yes. And again, to bring in some of the stuff I work on with Totogi. I think your analytics and those insights need to be connected to your charger. And that's what the Totogi charger is all about. It's less about charging the way we know it, but more about driving an experience or an engagement engine, right? Taking that insight, as someone who had a bad experience since the third time they've called this

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month about a particular issue and pushing out an offer or something to make sure they don't churn out. Right? And we have the data and they're trapped in all these silos and all these systems and the systems don't talk to each other. You think about the data, the network is producing every minute, what cell I'm connecting to, where I'm traveling... Imagine how personal you can make my experience. Right? The data's there, we just don't use it. And so I think the public cloud really enables that.

Mats Granryd 00:21:05

So how urgent is this, do you think, for operators? I mean, you mentioned several operators doing quite a lot. Are we — as a community of telcos — are we doing enough? Should we do more? How urgent, how nervous should we be about this?

Danielle Royston 00:21:19

I think, like I said, it's a cultural shift. It's a leadership conversation. It's such a big idea, and for the most part, telcos don't have this muscle in their organizations. They don't have cloud experts running around. This is the hottest tech skill. It's the hardest to get. And you're competing against Amazon, Microsoft, and Google to go attract it. I recently spoke with a group of strategy officers and my message to them is 'you don't know how to use it. And you don't have people that do.' I spend my time talking to your teams about how you can't start, not about what you can do. And so the way to get going is: set a goal and just start. I told a great story about Jamie Miller, the CIO of GE. She brings her technical leaders together saying we're going to move 50 applications to the public cloud, 50 workloads.

Danielle Royston 00:22:11

And the team is arguing with her, saying how it won't work and it's a dumb idea. And she's like, I hear you. I hear you. Let's take 30 days and let's do the best we can. And they moved 42. And in that course of that first month, they learned about their governance questions, their compliance issues, legal; but then they also got great ideas about what else could move. And it started that journey. And I think if you're going to get to some of the things we talked about, which is great ARPU and better customer experiences and doing things like Vodafone and hyperscalers at the edge and things like DISH, you got to start now. It's a decade —

Mats Granryd 00:22:47

So you would say it's fairly urgent. 00:Yeah. I'd say get going.) It's a "get going and see, and start to try and experiment". That's what you're saying. So if we're going to sit here again in 2025, on a rainy September afternoon, what will the world then look like from a cloud perspective? Will this be bread and butter? Would this be sort of —

Danielle Royston 00:23:06

I think it's bread and butter. I think we're seeing it. It's everywhere. I mean, every day I wake up, I can hardly keep up with the cloud announcements. Like a year ago, I was digging and searching. I was like, pick a telco's name and then add AWS to it, just to see if I could find anything. And now they're everywhere. In some places, it's faster than others, but the people that are starting to experiment now, I think in 2025, we'll have real measurable savings and results. And the guys that are kicking tires and waiting and seeing, I think they're going to have five years of catchup. And that matters.

Mats Granryd 00:23:39

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Would you say that since this is changing the infrastructure, the IT infrastructure and the mindset, would this be an opportunity for new players to come in? That doesn't have a legacy network, doesn't have a legacy way of doing things, but completely starting fresh.

Danielle Royston 00:23:54

Maybe this is where we kind of wrap up with DISH. People are like, okay, the United States, let them be another fourth player. They'll put in some constraints on how fast they had to build a network. Everyone's saying, no, it won't work. You can't possibly do it. And I think they're kind of using the public cloud to make it go faster and build a brand new network very, very quickly. And I think when people see that work, it's going to open up a lot of eyes of what's possible. You know, we always sort of talk in telco, 'oh, we move so slowly'. And I'm like, 'that's actually maybe by choice'. And maybe some people who decide to not move slowly, you're going to see more challenger brands that start to leverage that cloud, where you get to pay for what you use and pay for what you need and that's it and nothing more. It changes the economics of having to use a Ericsson package where the entry points, \$5 million and lower it. And so now people I think can really come in and do some damage. And so I don't know the sleepy people, you know, the incumbents, maybe won't like this, the challenger brands are going to love it. I think telco is super exciting.

Mats Granryd 00:24:59

Absolutely. And I think you mentioned several incumbents that are doing a lot DT, Vodafone, Andy Penn in Telstra, Verizon. And so there is a lot of movement though. I agree with you. Yeah. There's plenty of opportunity to improve NPS and improve ARPU and make sure —

Danielle Royston 00:25:14

I think it's really easy to sign a strategic partnership and make an announcement and do a press conference or press release. I think what we really need to watch is the projects and the results. And so..

Mats Granryd 00:25:24

Well, super. I've learned a lot. Thank you very much, DR. I love it. Thank you.

Danielle Royston 00:25:26

Super fun! Thank you so much for coming onto the podcast. Awesome.

Stick around because we're ending each podcast with a Telco in 20 Takeaway. I have 20 seconds to tell you something you need to know. Mats asked me some really great questions. If you have questions like Mats, I'd love to come visit you and maybe even record a podcast. We'd love to meet you in Dubai, Singapore, Sydney, Tokyo, Capetown, or even Kansas. If you want us to visit you drop me a DM @TelcoDR. Or send me a message on LinkedIn.

Meanwhile, we are crazy busy around here. As I mentioned with Mats, I'm heading to California for MWC LA happening October 26th through the 28th and I'm taking meetings. So if you're planning to be there too, let's meet up and don't forget that it's hyperscaler event season. Google Cloud Next just wrapped up, and Microsoft Ignite starts November 2nd, and last but not least be sure to catch Amazon's Reinvent,

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which kicks off at the end of November and will be held in person in Viva Las Vegas! Keep an eye on my blog because I'll be posting CliffsNotes for each of these events that highlight the sessions that matter most for telcos. I'll also blog about the most important information and announcements to come out of them after they wrap.

And if you're enjoying this podcast, as much as I am, don't forget to hit that subscribe button, share our podcast with your colleagues and leave us a review. You can also sign up for our awesome email newsletter on TelcoDR.com, hope to see you soon.

Later, nerds!