

Daniel Newman: Clay Magouyrk, welcome back to the 2021 edition of the Six Five Summit. We're so excited to have you once again as part of our event.

Clay Magouyrk: Yeah, it's great to be here. Thanks for having me, Daniel.

Daniel Newman: Yeah, it's a big day one and we are really glad to have so many influential voices coming from such a wide swath of the technology industry. Like I said, you were with us last year. The event went from a day and a half to five days and so we are really hoping that everybody out there is going to get a ton of value. I have a really good feeling that our conversation is going to cover a lot of ground. People that are interested in just the state of cloud and where this whole thing is heading, I'm going to hit you up across everything. We're going to talk about everything from silicon to hybrid architectures, to the whole approach that Oracle is taking but before I do that, I should probably just say, how you been? How are you doing? How's your last year gone?

Clay Magouyrk: Well, I spend a lot of time in front of a video camera talking to people on the internet. When I was growing up in the 90s, that was not cool. But now apparently, that is the state-of-the-art. It's the best in high technology these days. Look, I'm doing well, I think as well as everybody can. I'm super excited by where we're at in the world that I think things are getting better. They're on the upswing, not everywhere exactly, but the general trends. So I'm super excited for where the next year is going to take us.

Daniel Newman: Yeah. Who'd a thunk that being the AV guy or gal would become cool but all of these collaboration, apps and tools that are super neat across tech right now, that's just modern AV. So essentially if you love collab, you love AV and what's old is new and all that whole thing but I guess being AV is cool and you know what? Being tech is cool, right? Roadblocks, kids that code, all that stuff. Don't have your kids play football, have them write code. I'm not sure if I mean that, but I mean in serious, it's definitely something to consider.

Clay Magouyrk: Well, I don't have any children, so I don't think I can claim to be cool. I think the more I tried to claim it would be less and less true, but well, technology is taking over the world in general. We'll talk some more about cloud and other things today, but it's interesting how, in many ways I feel like if you go back 20 years ago, the world looks very similar. It's not like there were no cars and there's cars and there was no... But a lot of what people do every day and how they do it has fundamentally changed and you can't say that tech is not cool because everyone's doing it.

Daniel Newman: Oh, it's super cool. I will say this though, I turned 40 last week. I'm willing to admit that, some people wouldn't and I've lived two lives though. I've lived a life with technology everyday part of it and I lived a life without. I went to school where we had Apple IIE computers, and we were learning keyboarding and it was a special 30 minutes once a week that you got to go to the lab at school and type. I would think it would be fun though, in art... I know they've done some of these in some of those clickbait articles, like taking your phone out of everyday

existence but imagine now walking through an airport if for one day, people weren't carrying their technology. It's so different now. Anyways, I digress.

Clay Magouyrk: Well, I completely agree. I find it as hard as suddenly you have to show up on time and you have to make plans ahead of time because otherwise, you can't just talk to anyone any time. You're just, "Well, I guess I'll just wait." It's very weird.

Daniel Newman: Imagine taking a trip, you had to have your airline tickets. You had to know where your cab was going to be coming from. You actually had to book a hotel and advance. Couldn't get to the airport and be like, "Oh crud, and go onto an app." It's a whole nother world and the cloud has enabled a lot of this. By the way, I didn't plan any of this as a lead in, but last year we talked about the shifts in cloud infrastructure and of course, we thought we were in the middle of a pandemic that was likely probably going to end sometime not that far after, well, a year later, almost a year since the first Six Five Summit and we're still not done. We're done early or closer. We're getting to a point, some things are getting normal, the vaccine. It's opening up. The globe has changed.

So if I want to talk about that, last year we noted that there was a lot of momentum in cloud and what I can tell you, at least my assessment is this hasn't slowed at all whatsoever, but I'd love to know from a year ago to now, some of the key cloud trends that you've seen either accelerate faster or pop up since we talked last time.

Clay Magouyrk: Yeah, it's a great question. There's the general stuff, which is cloud adoption has accelerated I think with the COVID pandemic stuff. What people have realized is it's really nice to be able to have these services that everyone can work remotely, that cloud providers can take on more responsibility and then you don't have to deal with the consequences of that. I think these collaboration platforms are a great example. So, that's general stuff. When it comes to cloud infrastructure, from my perspective, I've noticed three things. The first one I would say is that the industry, which this has been happening over the past few years has really full on kind of embraced hybrid and multi-cloud. Three years ago, if I were talking to customers, a lot of them were like, "Hey, I'm going to move everything to this one public cloud vendor."

That's not the discussions I have with most customers these days. They've got some stuff on prem. It's going to stay there for a long time. They've got some stuff they're going to this public cloud, they needed to inter-operate with this other public cloud. They have some SaaS over here. The plan meets reality, it's a little bit more complicated. The second thing I think is that machine learning and AI continues to pervade more and more of the work that everyone does. That can be from very specific advancements with things like Alexa in your house or, or Siri on your phone, but it's changing the background, the way a lot of people do business. At Oracle, we've been doing very interesting projects with companies like Red Bull and the English Premier League on analytics and we actually did some really cool stuff with a soccer team here in the US optimizing

their players and using AI machine learning to call strategy for different pieces. So that's been a huge advancement.

I would say that the third thing that has happened, and this gets more into the deep guts of infrastructure, but that's my background and so I think it's very exciting is, ARM and this instruction set has really I'd say, taken over the world when it comes to mobile and IoT over the past decade or so. But if you look at now, what's happened in the past year, there's a huge advancement in ARM, on laptops and desktops with what Apple has been doing, like with the M1 and then if you see what is happening in the cloud infrastructure space, Ampere who's, our partner has done an amazing job with their Ampere Altra processor and we launched that recently, but also what Amazon is doing with Graviton and Graviton2. So there's a huge push to this new micro-architecture that's taking, I think the world by storm and cloud infrastructure.

Daniel Newman: Yeah, those are three big identifiers. I would agree with all of them. First of all, love soccer and English Premier League. So I went in on all of that, I want to find out where that's going on and you maybe make some investments, but in all serious, I'd love tracking the Rebel Racing piece to actually cover that, put some analysis on that. Those are the practical applications though, that really help people grasp what's going on. These are things when you start putting AI to work on things that people love and have passion for, it's when technology starts to make sense, which I love about that.

Clay Magouyrk: Completely. And I think, for example, I've been working with the Red Bull team and we've got the projects that we've already done, and we've got the future projects, but even simple things like doing Monte Carlo simulations about pit stop strategy around, if you do this and your competitors do that, and then update that information to live during the race, they're constantly be running these simulations during the race weekend to give them the best strategy calls as things unfold. Well, that's a great cloud use case. Not only is it AI and ML, it's a bursty workload. Hey, you only run it sometimes. You want to spin up, you want it to be super high performance, super secure, and then you want to spin it down.

So being able to work with companies who have very clear use cases like that, and then of course, including the machine learning training, and then taking in the huge data sets and then continuing to evolve those, it's super critical. I'm a racing fan in general. So there's that aspect of it, which is also just cool to be doing something that you feel so disarray.

Daniel Newman: Yeah, we'll have to talk more about that offline because I'm fanatical about going fast. You could call me Ricky Bobby. No, you can't call me that but I do like to go fast. In your other two assessments, you mentioned this, I completely agree hybrid multi-cloud just recently, even I believe it was Satya Nadella during Build, came out and really pushed that multi architecture, talked about making... And my point is, you're starting to see the trend. You mentioned Graviton around the ARM thing, but I'm saying all these different vendors are coming out and just

being really candid. We believe workloads are going to be in many places for different reasons and it's been really encouraging because I've identified that trend for a few years. I've been talking about it, but it's been only recently that I think we started to hear it with a little bit of a zest from the executives across the cloud space.

Clay Magouyrk:

I think the reason that all the cloud providers are saying it is because the customers are demanding it. Obviously as a cloud provider, we'd all prefer to take 100% of your workloads and our job is to be able to say yes to all of that and do them very well. But you know, I've never heard any vendor who goes, "Actually, we're not very good there. Go with this competing technology. That's probably best for you." That's not how they succeed long-term. But the reality is in the same way that in this on-premise world that we're coming from, nobody got everything from one provider. You didn't get all of your storage and your networking and your operating system and your computers and your business. No, you actually need to have multiple for a variety of reasons. They're not all the same level of quality, sophistication, reliability. Also you don't always want to put all your eggs in a single basket.

So what I think you're seeing is that in the early days of cloud infrastructure adoption, it was easy for people to bet on one because it wasn't the huge diversity of companies and it also wasn't the huge diversity of workloads. It's very different when you're just moving 10 or 15% of your workloads, "Hey, we'll move the digital marketing stuff over there. We'll do this new website." That's fine but when you're suddenly going, "I'm going to move everything, I'm going to move all of my core backend applications, all of my front end applications, everything that runs my entire business. Am I going to really put all of that on a single provider?"

I think what people are realizing, what cloud providers accept, what customers have shown us is that no, actually it's going to be multi-cloud. Even if in the long-term it's going to be public cloud everywhere, the transition is going to be many, many years where we're going to have a hybrid scenario and what they demand is they want cloud providers to actually deliver technological solutions that make it easy to run across clouds and then also to run between the public cloud and their existing data centers.

Daniel Newman:

Absolutely and you hit that on the head. I'm not by any means, claiming it's all altruism. The capitalism is a motivator and also customer experience is a motivator. In fact, I've talked to your peer, Rob Tarkoff about that and we'll have his session tomorrow about CX, but I'm saying it's becoming acknowledged. At one time, it wasn't even acknowledged. People were almost trying to force the fit and now we're starting to say, "Look, we know you're smart, you're figuring it out. You're doing your research. You're paying attention, whether it's sovereignty and compliance or regulatory or redundancy or just services, certain services, that one has another, you're going to probably want to have as much flexibility from cloud to cloud as you do from prem to cloud." So it's happening

and now the companies are to their credit, saying, "We care about the customer. So we're going to build the services to make it compatible."

By the way, we've got Simon Segars from ARM here and he'll be talking on Thursday, along with Jen-Hsun Huang from NVIDIA to talk about what you've mentioned, which by the way, couldn't agree more, the ARM contribution in the data center for building these A-sets and this multiprocessor story, I think it's just in its infancy. By the way, it's important to note, everybody wants it to be oral thing. Everybody wants it to be like, "Well, good ARM, bad Intel" and you're partners with both. The bottom line is that when a market is growing, this can be cloud. This can be the CPUs required for cloud. You can actually add competition, add innovation and all of the companies can keep growing. So that's one of the things that I think a lot of people don't want to acknowledge or want to make it competitive, but I think both companies could win and in the end, the customers wins.

Clay Magouyrk:

I completely agree. This is all about, I think having the right amount of competition. When you look at the micro architecture space, I think it's been great to see the resurgence of AMD over the past few years and I think that's providing value to customers and then having ARM and companies like Ampere like what Amazon's doing with Graviton, what it really provides, it provides more customer choice and it keeps these companies innovating what I think is going back to the thing we've started at the very beginning of this conversation, the reason that technology is so much better today than it was two decades ago is because there's been a relentless push and competition to make it better.

So I think that absolutely, ARM coming in, it's at the point now where ARM and what we're doing with Ampere, it's not a consolation prize, "Well, you could run that." No, actually it'll run better and you should. It's cheaper, it's faster. It's better for many workloads. Well, that causes companies like Intel to go and push and up their game. So that competition comes and then what I think, as you talked about NVIDIA, what they're doing with the GPU side and the AI accelerators, there's a huge explosion. In this industry, you see these ebbs and flows. Sometimes it's all software and then what I think is really cool now there's a lot more investment as an industry into the hardware. It's kind of going back to the old days of Silicon Valley. There's more and more investment into the cool advancements that we can make across hardware chips, hardware accelerators and it's a really exciting time to be in technology. I think it's an exciting time to be a person who gets to take advantage of these advancements.

Daniel Newman:

Yeah. In January, 2020, I wrote a trend piece in MarketWatch and I said semiconductors will eat the world. Everybody said, "Software will eat the world." Actually, I went one layer down. I said the chip layer is what it makes everything else possible. So the fact that you guys in the cloud industry as a whole is looking at architectures and the chips is a big indicator of where you all see it going.

So I want to take you there now. Let's talk about where we see it going. We mentioned competition drives positioning as was it LendingTree said, "When banks compete, you win." Well, when vendors compete, the enterprises win. I feel your story, the Oracle story, by the way in gen 2, is much refined, much better than gen 1. Clearly, that's been indicated through some of the successes and I'd love for you to share some of that, but I've really found the story to be a little bit more oriented towards simplicity. We know there's a sprawl of offerings, but as I look at what you're doing, I keep saying Oracle isn't necessarily trying to have 1,000 different variations of every offering like I feel some of the cloud providers have, and that might be working for them, but simplicity, it seems to be working for you. Talk about that. Is it working and why do you see it working?

Clay Magouyrk:

Yeah, I think so. One of the things that we've really tried to do as we design Architect OCI is to be incredibly thoughtful about what services we create, how do we have as few services as possible, but no fewer? And how do we factor things such that you solve all of the customer's problems, but without increasing the complexity? Because the reality is, and I think you can see this across all the layers, especially it affects things like security, the difficulty and a lot of times in doing things these days, especially in the cloud is not, "Oh, I can't do it or it's impossible." There's so many options. It's not there's one way. Well, there's five ways. There's this type of cueing and there's that type of streaming and there's this way and that option. Well, what do I do as a customer? Yes, you want choice because there is no one size fits all, but at the same time, it's very easy for customers to become overloaded by the huge variety.

So what we've tried to do is just take a step back and go, well, instead of having to build three new services, all that solved one third of that problem, how can we actually build an integrated solution that really solves that problem end to end, and then give that to customers and make it simpler for them to actually adopt it? Same thing if you were to look for example, at what we're doing with... We transitioned from our old fixed load balancer to our flexible load balancers, it would be very easy to say, "Oh, now we have a new service and then we have the old customers on the old thing and they need to migrate." No, we just make it as a new option and there's a one button click upgrade that seamlessly transitions you from one to the other. Sometimes you don't always get it right the first time.

How do you make it super easy for customers to make that transition? It's been critically important for us and that's where we're seeing his success because with a lot of the customers that we're going after, we're trying to enable them to move their most demanding workloads to the cloud. They already have enough complexity. They've got 15 different versions of this application, old operating system, this huge sprawl. They need us as a cloud provider to simplify that and make it super easy to move over.

If you look at a lot of our customer success over the past year with customers like FedEx and 7-Eleven, who've been able to take advantage of that simplicity and move it to our cloud or if you look at customers, for example, like ISVs, like

Tanium and Xactly and others in Cybereason are choosing our platform because of simplified security, very easy to understand billing model, predictable price, amazing performance, all the way up through a lot of our video streaming customers like Zoom or 8x8, who choose our platform because they need the security, they need the reliability and they need the really efficient cloud infrastructure economics, high scale, high bandwidth applications. They're all coming to us for exactly those reasons. It's not that I've suddenly built 50 new services that no one else has. It's about how do we solve those problems for the customer in a simpler, easier way?

Daniel Newman: Yeah, I think that's going to be the question a lot are going to ask. Of course, is you're more sophisticated, it's just like low code versus pro code. There are going to be instances where the app builder wants to have control over every instance, the DPU, they're going to want to build a commission resources exactly to each part of the stack. And then there's parts where it's like, "Look, I just need A, B and C. I don't want to think a lot about it. I want to do business. I want to grow. I want to scale."

I think Zoom was super representative of this. I don't know the full outlook as you probably do as to Zoom's commitment or Zoom uses what other clouds and how much distribution of its business. I'm sure it's probably a true multi-cloud player, but I thought that was a great example of a win. You're talking about a company that's just pouring on growth, added three, 400% revenue gains on a quarterly basis was an absolute winner of the unfortunate pandemic. But at the same time, it was keeping the world connected, but behind it, were cloud providers, behind it was endless scale being offered, knobs being turned that essentially said, "You can 10 X your customers in a week, in a month and we'll keep you running."

Clay Magouyrk: Yeah, completely. Zoom has been, I think, a huge, important piece of technology over the past year and they absolutely are multi-cloud and we're very happy that they were a customer of ours and they run a big chunk of their business on us. But that comes back to our multicloud discussion. Customers like Zoom, they're not all in on one cloud. They have their own data centers. They use multiple cloud providers and they're constantly optimizing what they put where and how do they optimize their business, whether it's they want global reach over here, or they need certain features that are only available in one spot? That's exactly what you do. I think that the reason that these customers ended up coming to OCI is there was a lack of awareness at the time, but Zoom was in a position where they needed capacity. They showed up and we had it for them and we were able to onboard them super, super quickly.

Finishing off that complexity, simplicity conversation, the low-code, no-code, the way I like to think about it is there's inherent complexity and there's accidental complexity. You want to have the options for people at whatever level of extraction they need if it's low code, if it's pro code all of that, but there are things that are essential to the task and to me, that's the inherent complexity and you can't really get rid of that. The only way to get rid of that is to really

make choices for the customer that you're not really qualified or aware to do, but there's a lot that we've done in cloud infrastructure, that it takes our accidental complexity, and we transfer it over to the customer. We make them solve problems that we, as a provider should be solving. At Oracle and OCI, we have a relentless focus on driving down that accidental complexity so that you, as a customer, get the full benefits of our services without having to go and optimize and create very complex machinery on the outside. That's really, I think the way to think about the simplicity of it.

Daniel Newman: Yeah, absolutely. So we've got a few minutes left, Clay and I've really enjoyed the conversation. Thanks for the time. Super happy to have you. Let's talk about the future. With so many great minds here in one place, I'm trying to ask this question in some form or variety to all of you. I want to know in your case, in the cloud, what's next? What's the next big evolution? What are you focusing on? What are you building? What's happening behind the scenes that you can share? I know you can't share everything, but what's going to drive the business forward? What's going to drive your next wave of growth? What are customers asking for?

Clay Magouyrk: Well, I think the big investments that we're making are really continuing down the same path. So it's not a new strategy, but it's a continued investment in evolution. What I hear from customers is that it's still too hard. The reality is we talk about the cloud, cloud, cloud, cloud, the vast majority of stuff's not in the cloud, and it's not because customers haven't heard about it. It's because it's too hard to move. So how do you make it easier for them? So we're making massive investments and making it super easy for people to migrate, but when you get there, it's too hard to do disaster recovery. It's too hard to do HA.

How do you make those things massively simpler to do? And not in this kind of simple way where it's like, "Well, you just rewrite your entire application using my new pass layer, and then you'll have easy HA." That's great. That'll help us 20 years from now, but how do I actually solve the problem for the 95% of our IT spend that actually generates 99% of our revenue? That's the things that we're really focused on. If you look at the huge investments that we're making with things like HeatWave on MySQL side, how do we do deep engineering projects to bring massive enhancements to existing workloads? That's what we're really trying to do instead of saying, "Hey, you customer, rework everything, rewire stuff, do it all." No. Oh, you have MySQL? Now suddenly, we have HeatWave and we can turn all of your analytics workloads hundreds of times faster. That's the kind of things that we see our customers asking for and we're doing that across every layer of the stack.

Daniel Newman: Well, that's a great assessment, a great little preview into our future, Clay and candidly, I've just really enjoyed this conversation. You've always been one to be more than out... pretty outspoken about where you see it going. I appreciated the evolution and watching the business developed both, Pat and I, our teams at Futurum and Moor Insights will continue to track, continue to cover and continue to provide our perspective, but a lot of improvement, a lot of vision



and like I said, I love competition. I truly do believe it spurs the innovation where the enterprise and the customers always benefit.

Clay Magouyrk: I completely agree. I really appreciate. This is the second tier here. I really appreciate all the conversations that we have. I think it's going to be a great Six Five Summit this year and I can't wait for next year.

Daniel Newman: Yeah, don't worry. We're going to bring you back. You've now become a lifer at the Six Five Summit, but no, great job. Thank you so much. Clay Magouyrk. Oracle leads the OCI business. Thanks again for attending and joining us here at the Six Five Summit. For everybody out there, stay tuned in. This is day one. This is the Cloud and Infrastructure Day. We have five days and we promise you lots more great speakers, great thinkers, great insights that you're going to glean from being here. All these sessions will be available on demand. So if you miss something, don't worry about it. Come back to it later, but stay tuned in, stay with us, share it with your friends, but for now, we've got to go. See you later, bye.