Absolutely Accenture actually got out very aggressively about four, five years of work ago with our cloud first strategy, and it was very public-centric, you know. How do we, you know, how do you start to take advantage of the innovation of the hyperscalers, the AWS's, The Assers's, to really start to innovate, drive, drive actual application development, and to get out there very quickly.

However if you take a look at our clients, you know, they are typically large complex global 2000 companies, and for a variety of reasons, our regulatory reason's, the GXB compliance, if you go to the pharmaceutical industry, HiPAA for health care, you know, PCI, they continue to invest in their data centers. I mean other reasons, Token Clouds are an interesting one It's a proximity thing, it's the thing that actually connects the public providers and NFE's getting built on that. Performance, you know if you start to look with SAP driving an eight terabyte Hyatt Hana, you know, where do you start to deploy that. So, you know, like even investments A lot of our clients have significant investments in their data centers and infrastructure.
So what we've been doing over the last probably six to eight months is really taking a look at a lot of the innovation that we saw from those hyperscalers and bringing it to the data center, and really trying to create industrialized private cloud with the same kind of standardization that you have in the world of Amazon, you know, same automation, the cloud operating model and really start to do that not just in the data center with private cloud, but the rest of infrastructure. And ultimately our clients are going to end up with hybrid environments, and what we're you know, we've been using our Accenture cloud platform to integrate, you know, the public providers now in the private side, you know, open shifts, you the BM wears the wall and even back into the legacy infrastructure.

>> Wow that's fascinating and also I think really grounded in reality. I mean the tech industry there's, you know, we all, there's all these pendulums and hype-cycles. And a few years ago that's right, we were talking a lot about public, there was a lot of innovation and maybe it's taken a few years for the private stack and the hybrid stack to catch up, to give you that advantage, in terms of agility, in terms of speed to market, speed to production. Can you talk a little bit about, maybe what that relationship with open-ship, you say you're seeing, we've seen a lot of open-shipped in production. Are you seeing that as well?

>> Yeah we definitely are, I mean, you know we have a lot of our clients here who are looking and are like "Hey I want to start "getting to more several architects, "I want to start adopting the new technology, Agile development" you know start to really embrace devops. At the same time, for data gravity, for compliance reasons there's starting to be applications that just can't move into the public environments. The SAP's, you know, has been challenging to do. Particularly as we start to get Hana. So you know they've been starting to look and say "Okay well open shipping become a very attractive "alternative to start developing applications "that I can then run in a private environment, "as well as bring up into Amazon and Assers".

>> So a few years ago for better or worse, one of the terms people were using was lift and shift.

>> Larry: Yeah.

>> And people were taking their, you know, legacy, a lot of years of battle tested infrastructure, and do you just hoist it into the cloud, do I have to rewrite it, can I containerize it. I mean, what are people doing and how are you helping them prepare?

>> That's a great question, going back to the scale of our clients, you know how clients will have anywhere from 2,000 to over 20,000 workloads and applications, so the notion of lift and shipped or modernization it's not a binary problem. So what we actually did was we took our app modernization practice, which is part of our technology business, we coupled it with our infrastructure migration team, so it's part of our Accenture operation's group, and we've created an integrated cloud factory, and then we actually took, we had two different sets of tools, we combined them into one accelerated tool kit.
And what that does is it allows us to do the upfront application portfolio assessment. We figured out the dispositions of the applications. You know, what needs to stay together. We determine which ones need to be refactored or remediated, or re-modernized, and that's our technology organization, and then for those that we need to just migrate, or so you know a few minor changes we then had to do, you know, all the planning, the migrations of that and we're able to do this at, you know, at scale at the factory leveraging all the combination of onshore and offshore, and these tools to do all of the automation, and to do the, you know, the wait planning, keeping dependencies, and moving data around, and we're able to do, you know, anywhere, you know, one client would do over 12,000 workloads a month.

>> That's amazing, the scale and the speed at the time to market even in the demos here on stage it's been actually pretty surprising to me because it means that it's real. As people are shifting their portfolios, into a hybrid stance, some workloads here, some were closed in a multi-cloud. Can you talk a little bit how you're approaching multi-cloud, and how you're approaching, maybe multi-cloud over time?

>> Well, we made a big bet on our Accenture cloud platform, which is really a CMP, started very public focus, you know how to I provision and manage and optimize my workloads across the public providers. We've now started to integrate on the private side much more aggressively. We were always doing it at our clients, but it was a very custom one off. As we start to industrialize and standardize on the private side, and now gives us seamless hybrid-cloud management.

We are actually extending that to go to legacy. We still got a number of clients, like insurance companies, where they've got significant business logic trapped in their mainframes. And our app modernization guys are starting to wrap those with microservices. Starting to do front-end development, you know in open shift, an example, and get closer to the users for, you know, for better customer experience, much for agile delivery while still maintaining that frame, and what we find is that you've got these distributed applications based on microservices you now need to manage the process on a hybrid environment. It's public, it's private, but it's also legacy infrastructure.

>> Yeah and that's got to be complicated. One of the other themes of this show, probably coming out of Red Hat's own culture of openness, and of, we had a great, I loved the keynote this morning talking about well, you know, planning is great, but eventually the plan is going to hit the battlefield and you've got to be adaptive and you've got to be agile. So when you were talking with the CIO, when you were talking with these leads of business and their IT leads, what were some of the things you were preparing them with, and what are maybe some of the signals that they're ready to do this, or maybe not ready to do this?

>> Yeah, you know that's a very good question. What's interesting is when I talk to most of the other CIO's I think they've got a pretty good handle on the technology. And not to trivialize, it's not simple technology but I think most can focus a lot of their energy on that. I think their biggest challenges are the culture, and the operating model.
So if you look at how the hyperscalers do it, I mean first they standardize, which I think, that's, you know. These CIO's are not typically driving standard t-shirt sizes. They don't have the discipline to have a standardized service catalog which you need to automate it.

>> Traditionally everything in that enterprise, everything was custom, everything was bespoke.

>> Exactly, so it's not in their DNA to go to that gross standardization, I mean, think about the hyperscalers, I mean Well Amazon innovates at an incredible pace, they still have a discreet set of services and if you can automate and do real cloud operating model you really need to have that level of standardization. The whole business and operational transformation is very difficult, you know, it's interesting now the apps guys have typically done a reasonably good job, I mean you getting out there and using Agile Development, you know, Their embedded in the BU's doing their sprints and etc, still some work to be done by the infrastructure guys. You know, you start to take a look at, you could have an app team doing, you know, two week sprints, they radio-drop codes, all of a sudden they have to wait 12 weeks for the infrastructure to catch up. So we'd be spending a lot of time looking at how we'd enable software to find infrastructure. How do we start to even do, you know, infrastructure is code with similar spreads and embed into the BU's, GRUMS, etc. Talent is a huge issue, I mean they all struggle. It's very hard to get people with native cloud skills. It sores them in the market, so most of our clients are really struggling. I mean it's good for us an an integrator and we are able to bring those skills, but they too need to develop those skills.

>> Well and that in some ways solves itself over time as standardization happens right?

>> Larry: Yep.

>> As Kubernetes become more ubiquitous you will have more people trained up in Kubernetes. Same thing with some of the infrastructure layer maybe can you drill down maybe a little more into the infrastructure and how are you helping so the infrastructure folks become more agile, you know at some point you got mainframes, they're not moving so you kind of got to wall them off with some agile layers.

>> We've put big proponents of software define infrastructure I think BM has actually done a really good job getting the market up to speed on software defined data centers, so how do you first use virtualization techniques, like if you think about BM or SNX or USIS ACI how do you deploy those to provide a vehicle to do the automation, and then severe, you know very intense automation. Now hey if I have to standardize for us then I have to automate, whether it's BM whether they realize it, it's Ansible. So I mean we've seen Red Hat do some great work around Ansible and doing a lot of automation, we use Chef in our Accenture cloud platform, but it really started to drive that similar type standardization and automation, but you have to change how you operate to do that and I think that's where a lot of people struggle. So they may have automation projects etc but they haven't really fundamentally shifted how they do it.
And one of our clients, a life sciences client. We were actually doing, we were implementing a software to find data center, we had service now, as the the front end portal you know v-realized automation integrated with the GXP compliance system, and we just kept iterating through and in two weeks sprints we would incrementally deliver, you know, first minimal viable product that computed in storage, then up the t-shirts, we got into, you know, more data bases service eventually being able to even spend our best AP basis instances. And we are able to leverage a lot of the automation including the network which is often times the in the long pole, in order to accomplish that.

>> Right right, so starting with bite-sized pieces incremental, incremental improvement

>> Larry: Exactly, and that's the great thing about agile right I mean but the problem is that the apps guys have know it for a while, as the Infrastructure guys are a little new, so we've actually taken our Accenture Devops platform and created an infrastructures cloud plug in, you know, that uses The Hub, and Jarot, and and outdeliver drop releases of infrastructure as code.

>> That's great I mean you've mentioned a lot of difference tools and platforms here, a lot of them a lot of them open source, you know, we're here at Red Hat Summit. I think one of the signals of this week, there were you know, announcements with Microsoft, announcements with IBM, you know very serious. And you've all been working with them, very serious enterprise ready, ecosystem here. Do you get any pushback about the open source nature of these things?

>> You know, less and less, a number of years ago there was clearly, you know, because of particularly in licensing enterprise great applications, I think the, you know, I think people become much more comfortable with open source, I mean, one thing I often look at is COPCA. I mean you look at, I mean, I see so much COPCA getting deployed right now it's you know, an open source model, I'm seeing it used in so many different usage you know, use cases, and development. So I think a lot of, and thanks to Red Hat you know give them credit for bringing open source to mainstream and to the enterprise market. Putting you know licensing around it. So I think, no I don't see the same kind of push back anymore, and I think the World's changed.

>> It's kind of the new normal right?

>> For the better, yeah

>> At either both of the cloud layer and then at the infrastructure layer and the automation and everything like that, you know. Maybe talk a little bit more about some of the Accenture, what I've been gathering here right, there's a bunch of open source tools you're using, but you have your own tool sets too, right, and the Accenture Cloud. Can you talk a little but more about

>> Yeah so the Accenture Cloud platform I mean do use a lot of third party technologies. We're not going to go reinvent the wheel, we're going to pull in the best of our products that we can. And we start it off, I mean, its been out there for about 5 years, its been, you know we have an orchestration platform that's built in to it.
We do use a lot of shaft to do you know the provisioning of the environment and we keep evolving, we’ve changed out building optimization engines, and now we’re very focused on how how do we push it into the private world. So that brings in new tools and capabilities to do that automation. So we continue to push that. The next big step that we’re focused on is the application and the infrastructure management. So one of the emerging problems in that we start to see microservices get adopted, and you might get an application that you might have a frontend running serverless than Amazon, on you know With Lambda, you know distributive private cloud with a catch DB, you know day to day base cash.

>> John: How do you manage all of that right?

>> Yeah and then a mainframe reservation system, so it’s one of our clients, has that environment. How do you manage and troubleshoot across that environment? So the ability to first look at the application or service depology, you know up in the tools, like I just saw a data trace presentation app ease in to the world. But then go, you know, the east west depology then mapping north south into virtualized and physical infrastructure and this to me is going to be one of our, you know, more difficult challenges because at the same time you’ve got that complexity getting more complicated, you know containers become much more dynamic, software to find networking becomes a lot harder to sectionalize and troubleshoot that so we start to look at the assurance of the service management side, and really start to innovate, you know, more there.

>> Yeah that’s amazing, I think that’s going to become more and more necessary. Right you know with big companies, global, you know, distributed all over the world, distributed on multiple platform with private components, all these services mixed together with the service bust. You know, when that blow up it’s going to blow up spectacular.

>> Yeah exactly and we’ve all been those calls with 50 people that we can’t afford to do. And I’m a network guy everyone points at us, So I really do want the tooling an the instrumentation I mean the other big change that’s interesting is the operators going to change, I mean I think it’s two major elements to that. It's obviously, you know, Devops, you know development and operations getting caught you know, much tighter together, SRE is a great example of that. And I think we you know, if I look at devops right now, I still very dev-centric. I mean we’ve grained on CI/CD pipelines, not quite as good on the op side. I think we’ve got some room to change there.

>> There’s a lot of growth and journey, I love that like the community, we can all learn together and I think that open source, and all these are a big piece of it.

>> But I look on the infrastructure side, infrastructure operation side, one of the things we are looking at now is how do we transform both our clients operators and our own operators when we do outsourcing.
So how do we take them, from what once was traditionally eyes on glass looking at consoles, and now, right, the next data ingestion, scripts, the analytic algorithms and visualizations, you know, write the next automations, to streamline something and over time, tune the AI engines. As we start to adopt AI, to particularly around performance optimizations, you know how do we start to incorporate that?

>> Absolutely, I think that we are all facing that. I mean it sounds like, I really enjoyed learning about how all, everything Accenture is bringing to the table, on this enterprise journey to the cloud. Larry thanks for joining us Larry Socher, Global lead for infrastructure growth and strategy for Accenture, thank for being on theCube.

>> Thank you I enjoyed it.

>> We are here, we're just wrapping up here. We've been live here for two days, at Red Hat Summit at San Francisco. We are closing up our second day. We'll be joining ya in the morning tomorrow as we finish off the conference, you can always come here live on theCube.

(energetic music)