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The Deloitte On Cloud Podcast

David Linthicum, Managing Director, Chief Cloud Strategy Officer, Deloitte Consulting LLP

Title: **Transformation at CME Group: Enabling innovation and managing change**

Description: Cloud transformations present many terrific opportunities for growth and innovation, but they have their challenges, as well. In this episode, David Linthicum and Julie Winkler, the chief commercial officer at CME Group, discuss CME's ongoing transformation journey. For Julie, the opportunities lie in enabling innovation and giving customers deeper insights to make better trading decisions. Meeting the challenges entails managing change and working with a solid collaborator for guidance.

Duration: **00:26:06**

David Linthicum:
Welcome back to the On Cloud podcast. Today on the show I'm joined by Julie Winkler, chief commercial officer at CME Group. Julie, welcome to the show.

Julie Winkler:
Thank you. Glad to be here.

David Linthicum:
You've been at CME for a long period of time. So, tell us about yourself, how you got into this kind of work, and what you focus on during your day job.

Julie Winkler:
Currently, David, I am the chief commercial officer there, and for those that don't know CME, we are the world's leading derivatives marketplace, and through the products that we list in futures, options, cash, and OTC markets, we help our clients optimize their portfolios, help them analyze data, and ultimately manage their risk in this very changing and dynamic marketplace. So, in my role, I'm overseeing about $1 billion in annual P&L and really focused on the growth of the company and also what we're doing within our data business. And I'm most excited, too, about some work that we did about ten years ago.

We started an innovative and acceleration lab at CME, and, some of that work came from the experience that we've had in Deloitte's greenhouse. And what's really kind of come full circle is now an opportunity that we have with a $1 billion investment from Google Cloud in CME to really bring together Google Cloud as well as CME to drive further innovation across capital markets, and that is what we're in the middle of right now. Part of that is our transition into the cloud and the digital transformation, and, so, excited to talk to you about that today.

David Linthicum:
Yeah, I'm seeing this as a core trend where people are driving industry-specific services, we're taking these things and combining them with technology to create a force multiplier for the customers who are out there who can consume this technology.

Julie Winkler:
Yes, definitely. A lot of the way the financial services industry has worked has been much the same for many decades. It's highly complicated, highly regulated, and to be able to really embrace all the technology advances that have happened requires a pretty large seismic change, and, so, I think within the ecosystem, many firms, many of our customers are on their own cloud journey as well, and the challenge is how you kind of build that intersection as well as deliver new ways of doing business across capital markets.

David Linthicum:
So, let's talk about who a customer or a client is that you're typically working with and how would they get started? How do they approach you? How do they get the ball rolling in terms of leveraging this model, this technology to kind of take things to the next level?

Julie Winkler:
So, we have customers around the globe, and a lot of the way that they begin their journey with us is often by seeing our data and subscribing to that data, accessing it through our vendors, coming to CME Group's website, and that is really why we've started there as well with our digital transformation and the work that we've been doing over the last year and a half is how can we make that data more accessible, consumable, how people are taking that data in, and just removing some of those frictions, and that is we've talked about really overhauling this delivery model and adapting agile. We're hoping that this is where we're going to continue to exceed clients' access to our markets, and that journey to get them to trade starts with understanding and using our data in their models, and, so, that's what we've been heavily focused on.

David Linthicum:
So, this is one of those things where one plus one equals five. So, you have the IP, you have the modeling, you have access to the data—correct me if I'm wrong—and you're partnering with large cloud providers that are able to provide the horsepower to make use of the data in certain ways that are going to be more valuable for the end user. Is that close?

Julie Winkler:
Yes, it is. So, we sit on a tremendous amount of proprietary data, as you pointed out, David. We've got 40 years of historical data, 600 terabytes of overall exchange data, and the amount of data that continues to be created; it's another billion daily messages. And, so, financial services in general is one where it also is highly sensitive data, and, so, our ability to be able to deliver client-specific data and ultimately delivering insights to them is a key part of this. So, raw data is one thing, it's something that the industry has done very, very well, but we need to take that journey for those customers from raw data to insights that much faster. The cloud is a game changer for us in that capacity, being able to layer on analytics, being able to allow customers to use our data alongside their own proprietary data, and just that usage, making it more user friendly is part of what the delivery model is and is attempting to change for our customers, and we're having some good early results.

David Linthicum:
So, what would those insights be and what value am I getting from those insights?

Julie Winkler:
So, we've been doing a number of minimum-viable-product tests, and, so, one of those is on transaction cost analysis and TCA work within financial services is pretty commonplace. I think what often is missing though is this more holistic view of how customers are looking at their TCA. And, so, you can think about it they likely are executing, so if we take an asset manager that maybe has multiple banks that they execute through today, they might be getting a view of that TCA from one of the banks.

CME is in a very unique position that we can actually provide that combined TCA, or total cost analysis, across all of the venues that they're trading with us, as well as all of the firms that they're using to access our marketplace. And being able to provide that back in a very detailed way is going to allow those customers to figure out, am I actually executing in the best way possible? Where is there some price slippage perhaps happening that I otherwise am not

aware of but through these proprietary tools and analytics that CME is able to provide, we're hoping to improve their trading experience with us in a very unique way.

David Linthicum:
What are some of the things, the prework you have to do, your customers have to do and the planning that occurs? I suppose it's key to being successful with this technology, with this approach, with this IP, with these processes, but what does that entail?

Julie Winkler:
Yeah, so we took a very I'd say broad view in the journey of how we kind of got to deliver the tools like TCA and really thinking about how do we operate today, bringing together a cross-functional group across technology, across business, and we spent about ten weeks up front just designing what that component, what that experience would be and trying to really understand where just those obstacles of how clients are accessing us today that we need to improve. And what we kind of came to is there are bottlenecks. There needs to be ways that we accelerate how customers are gaining that value, and, so, it kind of resulted into kind of two main delivery threads, and this was kind of our approach to the transformation.

One is that enablement feature of kind of all of the change management behind it, the training of our employees, the HR processes, the roles, how do we create custom learning paths, really trying to get us ready before the second stage, which is really execution, and that's where partners have been integral of helping us understand what are best practices across Agile, who is in the best capacity to help us kind of move into this model because this is fairly disruptive if this is not the way that the business and tech teams have worked together in the past. And, so, often the way we've kind of described it is you certainly can go to the gym. You can get a workout and you're definitely exercising and in better shape, but you won't get to those same results unless you truly have a trainer that's holding you accountable, and that's the same thing we've seen in the execution of this process as well, of having really those Agile coaches and scrum master coaches have been really critical to help our employees figure out what this all means and get us better at delivery.

David Linthicum:
Yeah, it's everything. I think the ability to kind of ramp up to leveraging this kind of technology, and certainly something like this where it's complex in nature but really the more you get educated, it's easier to leverage and it becomes more apparent and logical in how you're leveraging it. So, let's dig into the Google relationship, which is key. So, how is this transformation into Google and CME, how does this work out for you guys, work out for your customers, even work with Deloitte or other consulting firms you're working with?

Julie Winkler:
So, it's been an exciting partnership, and it is really kind of down three main areas, the first of those being how can we take low-latency type applications such as our data business or our clearing applications and move those into a cloud environment that is going to create that better customer experience that I talked about earlier, and that is the work that's kind of well underway.

The second piece of it is really how do we transform actually moving our markets into the cloud, and this is the pretty disruptive portion of it where our customers today are used to and thrive on the determinism and the low-latency environment that capital markets really depend on to be as efficient as possible. And this is not something that's easily replicated in the cloud today, and for us it was an obvious choice to work with Google Cloud to engineer something that didn't exist today. We are out there actively talking to our global customers and getting their input along the way, but that's the kind of the engineering feat that sits in that second bucket.

And then the third piece is, as part of our commercial relationship, it's about innovation. How are we thinking about this, what are those common threads across all things cloud that we can do better within capital markets by CME Group and Google coming together, and that's been I think a great and unique aspect of this partnership. Typically those would be things that you would solve for maybe after the fact or once you got going. This is something that we started with out of the gate, and just being able to bring our teams together across so many different domains, it's been a lot of fun heading that up, and I know there's going to be more great things we have to deliver.

David Linthicum:
Yeah, I've seen a lot of these symbiotic relationships start to emerge where you have organizations such as CME that have deep industry skills, in this case, the ability to deal with finance and do so in creative ways are able to determine different insights and things like that that were probably not possible before. And then they team up with the horsepower of cloud providers and really get into industry-specific services. And, so, it's an offering that's going to not only have the IP that you need to make things happen, but it's going to have the pre-implementation and testing and partnership that already goes with an existing cloud provider, so it's already something that can deploy pretty easily. And then I think that we're eliminating some of the risk in moving to this kind of technology.

Julie Winkler:
Yeah, that's definitely the case. We have had a tremendous benefit from all the work that Google has done in this space, and I think for them it was we were a really good partner fit for them in terms of the deep capital markets experience that we have. And, so, I think combining those two to think about where can we be disruptive, where are we going to try to execute some things that people just don't think is possible together, but also being very, I think, partnership-driven and measuring the outcome that has been a huge part of this as we've gone along the way is where are we making progress, where are we falling behind, and how do we use implementation partners like Deloitte to improve that movement for us, and that's been a key part of how we've delivered what we have so far, and we've still got eight more years ahead of us.

David Linthicum:
So, the focus is really you providing a turnkey solution for clients and customers.

Julie Winkler:
I wish it was as easy to say turnkey. Obviously, that was the goal with it.

David Linthicum:

We get further down the line with your technology than if we're going to build something because having done that before, having built risk analytical systems and different assets, swaps, and things like that in my time in building a banking system, it just seems to me this is a dream come true. We're able to get further down the line with pre-built IT, really things that are tested out and concepts, things like that that are already in the marketplace, which is already tested and deployed on a particular platform, and then comes with lots of people who are around who can tell you how to leverage that correctly and the ability to teach them how to do it. So, it's easier to work with your technology and your tools than it would be to go on your own and custom build this stuff, which I think a lot of people are doing.

Julie Winkler:

Yes, they do, and I think we're hoping to be industry leading and taking this partnership with Google, and a lot of it is what is already out there that can be built. I mean, the financial ecosystem is a complicated one, lots of vendors, lots of middleware providers throughout, and yet also a highly regulated business with a number of systemically important financial institutions, and, so, our ability to deliver that in a highly secure way, it becomes better when there's industrial strength cloud offerings such as the one that we'll be building that can be the center of that, and I think that's what clients certainly are looking to us to deliver and doing that in a highly secure way is a really important part of this.

David Linthicum:

Yeah, even looking at the larger trends, we're seeing this occurring in manufacturing and retail and other areas, certainly financial banking and insurance, and I think this is really going to be the larger trend moving forward. We found that focusing on vertical-specific industries, specific business, specific services and the ability to kind of implement those in some—I use the word turnkey again—but some kind of an easier way to do it other than DIYing your way to it is do it yourself, is really kind of the wave of the future. I think that some of the big problems in building cloud systems, in my opinion, is we're always reinventing the wheel.

We're building things that have already been built thousands of times over, and I always think about that when defining new systems and the ability to kind of look at this, and I'm going up a few levels now, to be able to look at this as IP that could be reused where you're able to take the best thinking in the market and implement it using automated procedures and, something that scales absolutely. I think what people should be thinking about in the marketplace versus, again, reinventing everything themselves. So, this entails, obviously, moving to different operating model. So, if we're going to shift to a new operating model, a product operating model, what does that mean for your company, what does that mean for Google, what does that mean for the business of the client that's implementing this?

Julie Winkler:

So, a key part of that has just been embedding all of this customer centricity at the center of that product operating model. I think for probably ourselves, and many organizations, there was kind of a divide between perhaps what the business was hearing from customers, throwing ideas over the fence for our technology teams to iterate on and build, not a lot of great transparency around the timing of how that would happen, and spreading technology folks fairly thinly across a number of different areas at any one point in time. And, so, for us, the implementation of this product operating model has really meant we have far more dedicated and focused resources, we're reducing the handoffs and the dependencies, and a big tenet of this has been that wait time that sometimes gets in there and externalities. And this is dramatically improving then that time to market and making it far more iterative.

And I love the fact that we are now able to pull our customers into the buildout of these MVPs more so than we ever have before, and that, ultimately, then is providing them with a better customer experience, our business folks are happier because they have greater transparency and can estimate when these projects are going to be completed, and, ultimately, we're bringing revenue in the door faster, especially as it relates back to some new data products than before, and it all starts with that customer at the center and making sure every person understands across the tech and the business teams within these pods, hey, what is it that the unmet customer need is, and how are we together and collectively going about solving for that?

David Linthicum:

Yes, and also looking for repeatable ways is what you're talking about to solve the problem by repeatable automation techniques, and, so, iterating to the product to make it better and better and better, and everybody can enjoy and benefit from those improvements to the product, which is made to align to the market. I think that's absolutely what a lot of people need to do as they're building systems not just like this but other systems—supply chain integration systems, manufacturing productivity systems, things like that—to do it in that way. And I think in many instances they're missing the mark and they're leaving functionality and needed functionality behind and not plugging into their local market, what their clients need, but also the greater market in terms of where things are going. So, obviously, everything doesn't go well as you go through this stuff. What lessons learned have you had that—things you may want to do over or even do better or what did the industry teach you?

Julie Winkler:

Can certainly say that everything does go well. I do think, though, a lot of what we've seen at CME, and I think is fairly common with what I've read on other digital transformations, is you really have to get people's mindsets around the change, and transforming the talent is a key part of really delivering what is going to be the positive outcome for the customers. For us, it was often hard when we had brand-new teams that we were standing up in this transformation that didn't have a lot of experience working in this manner. And what we began to find is you needed to find those individuals that could really be evangelical about, yes, the model can work, yes, you're going to need to take some risks, and having really more I'd say flexibility as well as exposure and visibility to those individuals but ultimately this became about the experience on the job, but they started to feel more comfortable when they saw other people around them that told them it was going to be okay, they acted with their own feet and, solved some of those problems.

In one example though, we realized that the issue was that the team itself hadn't built enough rapport with one another. And we said we've got to stop what's going on, we don't see the velocity in the throughput in this pod that we should, and we had all these people come together, fly in from across the globe for a week, and really just spent the time building that psychological safety and trust amongst them. And there were times when even that meeting itself, it was a chaotic week, coming out of it we saw a much better outcome because, again, I think this is about building that trust within those teams, a

huge part of it is managing talent, and I think that's probably what most people don't believe is going to be as impactful, and they probably underinvest in that area.

David Linthicum:
What I love about your story is you're very productivity-oriented to be self-critical. You're looking at things that you can do better and improving them as you're going, and, so, that's absolutely what's needed in a healthy organization, and certainly doing what you're doing where you're standing that new stuff up that's unique IP in the marketplace, you need technology in the marketplace, and you have to have that mindset and mentality to make it work. So, what comes next in the work that you're doing? What should we be looking for?

Julie Winkler:
We are continuing to accelerate a lot of this data work, and really the next step for us is looking at that clearing component which is just such a critical part of how we help to manage risk across our clients. We are moving into a product operating model in that, as well. And then continuing to work on the match engine piece that I spoke about earlier and engaging our customers, understanding what this will look like from their perspective. We're one where people are heavily dependent on their own individualized hardware, which makes moving to the cloud a bit more challenging, but it's also something that we have a tremendous amount of conviction around and we'll be continuing to move ahead with that, and that's really what's on the horizon.

David Linthicum:
Yeah, and I love the story. I think folks out there who listen to the podcast come at this from a business orientation, looking for the business value in this technology and how it makes it work. Your story is that story and also the ability to leverage technology, in this case cloud-based systems, and in your case, Google Cloud platform is this force multiplier to make the technology work, and you've got to bring all this stuff together. It has to be three legs to the stool, and I think that sometimes we have a tendency to be overly focused on the technology side and kind of manage by magazine in terms of moving after trends in technology. Now it's AI and other things that are out there, but really finding a pragmatic application in the business and doing so where we're doing things that are hard in a repeatable way. And I kind of got out of the conversation with you and the other conversations as well that that's something that really is kind of foundational in what you guys do. So, where can we find more about you on the web and more about your company?

Julie Winkler:
Yeah, you can certainly check me out on LinkedIn as well as we've got some great content on CME, and we'll continue to push out kind of our digital transformation journey with Google Cloud.

David Linthicum:
This is the kind of story that I love. As we discussed before, this is something that we're taking to the next level, and I think this is going to be something where you're going to repeat in the market with different problem domains and different business problems we're looking to solve but again trying to take cloud computing to the level of making it bringing value back to the business is going to be focused on product problem solving like this does, and I think it's absolutely imperative that we keep an eye on that in the marketplace and make sure we're leveraging those best practices and the way of doing things in a productize and repeatable way is something that's kind of built into our infrastructure.

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