



## The Deloitte On Cloud Podcast

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**Title:** Hybrid by design: IBM's Roger Premo on how to reshape your organization for cloud's "third wave"

**Description:** In this episode, Mike Kavis talks with IBM's Roger Premo about Roger's upcoming publication, "Are You Ready for the Cloud's Third Wave?" They discuss the principle of hybrid by design and its philosophy of intentionality. According to Roger, designing for the next generation of cloud involves cultivating a product-development mentality for IT, removing organizational silos, redesigning the operating model, and planning for a future that includes the ubiquity of Generative AI.

**Duration:** 00:29:46

**Mike Kavis:**

Hey everyone, and welcome back to the On Cloud podcast, where we get real about cloud technology. We discuss all the hot topics around cloud computing with the people in the field who do the work every day. I'm your host, Mike Kavis, Chief Cloud Architect over at Deloitte. Today, I'm joined by Roger Premo. Roger is IBM general manager, corporate strategy and ventures. Roger, welcome to the show. Why don't you tell us a little bit about your background and the work you're doing at IBM?

**Roger Premo:**

Yeah. Hey, great to be here first off. Yeah, so I lead IBM's overall strategy efforts and I lead our venture capital team, which those work together seeing early innovators in the market and seeing how it informs strategic direction. But I own setting IBM's overall strategy, and we'll talk about it today but a lot of it has to do with hybrid cloud and AI, so very relevant to today's topic. Before that, I was a strategy consultant for nearly a decade and a half. I led the software and SaaS practice. So I worked a lot with a lot of tech innovators. And before that, I had a software startup background working in SaaS companies before the term SaaS was coined. So, go back to being an operator as well.

**Mike Kavis:**

Yeah, we got a little common there because I did some startups in the SaaS world, but it was when SaaS was known.

**Roger Premo:**

Yeah.

**Mike Kavis:**

Yeah, cool. Well, great to have you. One of the first topics, we're going to talk about a white paper that you collaborated with some of my colleagues on over here at Deloitte and it was titled, "Are You Ready for the Cloud's Third Wave?" And I'm not going to describe what all this is but I'm going to lead with a little of it. But when cloud first started there was this mad dash. So, it was a little short-term thinking, "Get to the cloud." And I think when COVID hit, everyone's working remote, there was like another level of, "Let's get everything to SaaS or cloud or something." So, what is this third wave that this article is talking about? And we'll include the article in the show notes for people to read later, but what is this third wave and what did we learn from the first two that hopefully we do different this time around?

**Roger Premo:**

Well, I think, yeah, maybe let's start with what happened in the first wave. You kind of hinted at it: There were these various stages of cloud adoption, but that cloud adoption often happened in a siloed way where one part of the business might adopt a particular cloud vendor who might acquire a company, or

another part of the business worked with a different cloud vendor. And while there was this rush to innovation that created this sprawl of complexity because we have different practices, different applications, different teams using different environments. And the net of it is that complexity. There are a lot of factors, but the complexity in particular got in the way of getting the business value out of those migrations to the cloud.

And the real thought on this third wave of cloud is based on early adopters that have done this well, and they've been very intentional about taking a hybrid by design approach. That is, the notion of creating platforms that span that complexity, so that you abstract away some of that complexity and really can get to business value. Intentional architecture really does have a series of different kind of technology and simplification benefits that are part of unlocking that value. And so, we see that as critical because I think in a lot of different industries, the adoption of cloud technologies, the adoption of AI, now it's not an optional exercise. To differentiate and win in your industries, you're going to have to do that well. And if you're doing that on a kind of poorly constructed kind of base architecture, the chances of success are very low. And it's really about helping our joint clients succeed in their digital and AI initiatives.

**Mike Kavis:**

Yeah, I've seen a lot of clients who are kind of paralyzed from the result of that early rush to the cloud. And I was guilty of this too for my startup days, when we started, Amazon only had a dozen APIs. So, it truly was just infrastructure. So, we were thinking like a data center. And over the years, obviously now there's high levels of abstraction, there's machine learning as a service, it's gone up the stack. But a lot of implementation, on top of being rushed, were more data-center-centric and doing the same things we did in a data center in the cloud, which probably wasn't the best use of everyone's time. So, there's a lot of companies right now trying to unwind that, but it's hard because that stuff's running segments of the business. So, how do we do the intentional architecture, but we've still got this spaghetti over here that we're trying to unwind while we're running the business. That's a big problem I see with a lot of clients.

**Roger Premo:**

It's a big question, I think. And there's great work from the Deloitte team that went into this study. Only 17 percent of clients in the Deloitte survey had actually articulated what their future state for cloud was expected to be. And consequently, there's only about 25 percent of them that said they'd actually gotten ROI from the prior generations of cloud transformation. So, we're talking about something where the majority of companies out there haven't articulated it. So, I think step one is starting to articulate a north star from an architectural perspective, realizing that it will be a long time to migrate there. But first you have to have some understanding of what the target state is there.

And then secondarily, it's how you're going to get there. And it's a set of, in our perspective, there's a series of quick wins where you can clean up a lot of that complexity when it gets to modernizing or re-architecting applications, obviously that's a longer journey. I know you've got a lot of passion on this one too, but it's also about constructing the operating model and the organization that can deliver against that architecture, because if we have people whose job definition is all about delivering in a particular environment, the organization reinforces the heterogeneity. So, we've got to have different ways of constructing and operating the business to take advantage of that intentional hybrid by design approach.

**Mike Kavis:**

Yeah, and I've seen examples where a lot of this stuff was done in silo. As you mentioned in the beginning, the cloud team was spun up and they built something, and they did a great job of deploying pipelines and getting to something in five minutes. But as you said, they didn't address the overall operating model with the rest of the organization. So, they still had all the stop gates, all the approvals, all the signups. And even though they could do something in five, 10 minutes it still took them three months to get it to production. So, the companies that are doing it right, how are they addressing this big operating model challenge?

**Roger Premo:**

Well, I'd say a couple of things. I think one is they are breaking down some of the organizational silos, both within their teams and to the business, because this is not about delivering the IT department to be completely distinct from the business. This is about the integration of business and technology together. So, a couple of examples. I've seen one starting down this hybrid by design journey and it specifically got to what I was mentioning earlier. They actually had cloud teams dedicated against particular hyperscale cloud vendors. And then they had a data center team. And if your job description says, "I'm all about putting more workload in my data center," or, "I'm all about putting more workload into vendor X," you'd fight the hybrid cloud initiatives. And so, they actually had to create a hybrid cloud team that had skills from both sides that created something where they were. They placed the right workload in the right location, and it took away the kind of organizational incentives to compete for turf in different environments. So, we saw that within the technology teams themselves.

Similarly, we've seen that with the DevOps teams as well. So, that making sure that all the way up to the developer writing applications, you don't make them about being a Cloud X developer; you make them about being an application developer for your enterprise. So, we've seen a lot of that within technology teams to take away some of those kind of vendor dependent silos. With the business, we've just seen a collaboration model with the business, but recognizing that as we do that, we need to have a much tighter loop with the business stakeholders for whom we're doing this innovation, because it is unlocking a lot of that complexity. It does allow the ability to kind of innovate with the business much more rapidly, but you almost have to have much more of a software product development mindset around how you collaborate with the business, rather than kind of an IT, long-term roadmap requirements, documents type of mindset. So, it really takes this kind of product-oriented thinking and how we treat effectively the business as one of my key customers in building new technology products to support their operations.

**Mike Kavis:**

Yeah, and these problems we're talking about have existed since the beginning of time. I think what's changed is the promise of the velocity of delivery has made it that we need to solve these things faster. So, an example, a long time ago, way before cloud, I was in application development and I was one of four VPs: Somebody owned database, somebody owned infrastructure, somebody owned something else. And we all had our top 10 list, and none of my stuff was on any of theirs and none of their stuff was on any of mine. So I couldn't get work done, none of us, because we all needed something from someone else, but we had a different top 10 list.

So, not only is it the operating model, but rethink how you budget. All those types of things. It's more being a team rather than specialists in silos. And that's easy to say but that's why we say, "Technology is easy, people hard," that's people, that's organizational structure, that's turf wars. Have you seen people solve that one? And when they do, what's the makeup of those teams? What does a successful organization look like culturally that can pull that off?

**Roger Premo:**

So, I think actually there's a much more detailed step-by-step guide in the white paper that starts getting down the path of really addressing some of these questions, because obviously, Mike, we're tackling massive technology and business change questions and it's hard to distill it down to just a couple of quick answers. But I'd say, first off, the success pattern I've seen relates back to that product mindset. I mean, if I go back to my software product background, a lot of those are solved by the prioritization that a product manager does. I think of the product manager as the person who's marrying kind of customer needs with technical feasibility, technical possibility, and building a prioritized roadmap. And that product manager lives in two worlds. They've got to spend time with their technology team about what can they implement, and they've got to spend time with their end customers about what is the most important thing, really building empathy with the business about what they really need. And so, I put a lot of that into these product management thought processes of how do you put this decision-making into one roadmap?

And so, if you empower those product-oriented teams to drive that decision-making and prioritize that technology roadmap based on what best serves the business, and there's different technology silos that may not like the answer to that roadmap, because it's different than their priority list, but it tends to be much better oriented to what the business needs.

And back to the hybrid by design notion, if you're doing it in a way in which it's not bespoke for each of the different technology environments, that also means that that product innovation you're doing, if you've got a geographic business where part of its serving clients in US and Europe but they're on different clouds and different geographies, it also means that when you're prioritizing that product roadmap, you're doing it for the full business and not doing it to, again, implement on this cloud here and the customers in Europe have to wait another year or two to get their function. So, again, the hybrid by design platform thinking accelerates the value you can get from a product-oriented approach.

**Mike Kavis:**

Yeah, and the business doesn't care which cloud you're on or even if you're on a cloud. All they care is you're delivering. And we in IT sometimes get stuck in the ones and zeros, but at the end of the day we have to deliver. So, yeah, that's incredibly important. One other thing I wanted to put out there, because we talked a little bit about AI at the beginning, is a lot of companies are wanting to train their own models and they don't want that in the public cloud, not all things, but there are lots and lots of use cases for doing this stuff in-house. It's kind of creating a rebirth, not that it ever went anywhere, but a rebirth of the private cloud. So, again, hitting on the importance of this hybrid by design, how is AI driving this hybrid by design and putting it in the spotlight more than before?

**Roger Premo:**

So, first off, I was just with one of the leading market analysts in the space this morning, and they were going through the inquiries they're getting from customers on it. And they said they've covered hundreds of Gen AI requests from kind of the Global 2000, and 100 percent of them are hybrid multi-cloud. They're going to have to deal with Gen AI. Practically every large company in the world is hybrid multi-cloud and they're thinking about doing their Gen AI in a similar footprint because the mindset is, "I'm not going to re-litigate where all my applications and processes run. I'm going to bring the Gen AI to where my workflows are today." And for most large companies around the world that is hybrid multi-cloud.

And then I think if you get to your training use case, and I'd extend it to not just kind of from-scratch training, but any kind of fine tuning where you're using kind of the enterprise's data, you're working with data assets that are kind of the crown jewels of the company. And in a lot of cases, that data was kept on premise because there's real concerns about having it leave the four walls of the enterprise for both data regulations and for data security reasons.

And I think that, to your point, it's even more true in this generative AI era. If you build or finetune a model with your enterprise data, you're effectively taking the intellectual property of your company and putting it into one model. And so, the security bar for this should be much higher than it might've been for an individual piece of data. because all of a sudden that Gen AI is aware of kind of your IP and kind of your competitive advantage. So, I think, yes, it is driving a big resurgence in the data center. And there's a lot of demand from customers to do a lot of their model training and tuning within their data center, especially while a lot of the other kind of governance, security, explainability, access challenges of generative AI still have big questions marks around them. I think for companies that want to take advantage of it but still want to not accidentally trip a trip wire, yeah, we are seeing a lot of demand for that kind of data center training and tuning of these models.

**Mike Kavis:**

So, for the clients who went to the cloud kind of siloed, they built like a cloud organization and had a different data center organization. And even in those situations, now a lot of the AI capabilities in at least some of the models are going to be on-prem. So, for the ones that didn't solve the things we're talking about over here, the operating model challenges and those types of things, how hard is it going to be for them? And what should they do to really get the value out of AI? The ones that do it right will get there fast. The ones that don't, you're going to see two, three years of investment and very little return. So, get your crystal ball out. How's this going to play out?

**Roger Premo:**

Well, so I have talked to some CTOs that have said, "We went through kind of this framework," hybrid by default and hybrid by design. And they acknowledged they and their predecessors allowed the business to get to hybrid by default. And they recognize the incredible value generative AI is going to create, the complexity it's going to create that you're kind of getting to just now, and then just the cost point, recognizing that depending on the model and the vendor, I mean, if it's running in the data center versus running as a cloud API, you can have orders of magnitude different spend levels on the inference of these things.

So, they recognize the stakes are high. And at least a couple, when they look at something like this, say, "I want to use generative AI as the catalyst to get to the right intentional architectures around how I do my technology." And they kind of look at the sins of the past and learn from them to say, "It needs to be different now." At the same time, I think the reality is you still also see a bunch of pilots spinning up on different clouds and different API calls to different vendors.

So, I think the challenge to our clients who lead the technology organizations for many of these large enterprises is to really quickly start building that north star of where you want to get to from a technical architecture and start building towards that because we know the same challenges that we talked about before are going to manifest in the AI era, but we can at least learn from the mistakes and do it right this time. So, you've got to start building a target of the destination so you know where to guide the organization towards.

The last thing I'd say is everybody recognizes that generative AI, you probably want to relook at that on a much more regular basis because it's been such a dynamic technology: new model vendors, new innovations, new patterns of how to tune these models. So, it probably is something where you want to write down a north star today, but you almost want to schedule the process by which you revisit that north star based on what you learned. I'd love to have a better answer than that, but it is something where we're just finding the cycle of learning is much shorter in this technology than it has been in prior technologies.

**Mike Kavis:**

Yeah, and the other thing that I keep thinking out loud to myself is that the technology, as amazing as it is, is in its infancy stage. It's not even close to where it's going to be. So, we're already seeing so much value when done right where people can be more productive, work can be offloaded to machines and all that, but it's not pretty yet. The machines still need to learn better. There's still bias in it. So, it's got a long way to go, just like when we started cloud, where we are today is leap years ahead.

**Roger Premo:**

Yeah. No, I think we're very similar. We're probably even earlier than, what was it you said, 12 APIs on the cloud? We're probably even earlier than the 12 APIs era, but yeah, we've got so much more to do. And that's why this notion of hybrid by design matters a lot. We know so much change is going. If I'm building an architecture that locks me into a particular silo today for generative AI, you can almost guarantee that's not going to be the right answer for the business a couple of years from now. So, building an intentional architecture that has kind of the notion of being able to run across environments and have that flexibility now, is super important. And it'll just be essential to businesses deriving real value from this at scale.

**Mike Kavis:**

Are you seeing teams or clients bringing in organizational change management groups? Because, I mean, we've both been in IT for a long time and typically IT just does it all, but we saw it with cloud and we're seeing it here. It's just getting to where a lot of this is people and process and change. And there are people who do that for a living and us IT nerds probably aren't the best at that. Are you seeing companies finally starting to bring in HR teams, change management experts to help on this journey?

**Roger Premo:**

The short answer is yes. I think for a lot of the consultants and advisors that focus on that change management, I think it's not just the raw change management skills, it's ones that have technical fluency or they bring in the technology practice alongside so you're doing it with an understanding of where this tech is going, absolutely. And I see a lot of work out there from many different advisors really looking at the future of this, looking at the future of how it changes the work and roles in the organization, how you have to reconstruct the organization to take advantage of this technology.

Yeah, I think there already is a tailwind for a lot of those kind of change in organizational advisors. And we're just at the very beginnings of this work because we're just really beginning to see the first front end of this really changing workforces. And I can just say in IBM's business we've seen huge productivity because we try to use ourselves as early adopters of this technology. We're seeing a ton of efficiency, areas where – 40 percent productivity in certain teams around the adoption of this technology, and then it really reshapes our workforce. So, we're seeing it firsthand in our business as well. We're kind of being our own advisor through that process, but it will – there'll be huge changes to how work gets done, how processes execute and the shape of labor inside companies that adopt this technology.

**Mike Kavis:**

Well, get your crystal ball out again, because that's what it takes for all this Gen AI stuff. But fast forward five years, and we're just throwing darts at the dartboard here, but how much of a difference in competition do you see let's say there's two insurance companies who are head-to-head and one embraces this change and does all the hybrid by design stuff and actually pulls it off versus a company that resists it. What is the risk there for the company that resists it? And what kind of a step change do you think this would be in that scenario?

**Roger Premo:**

I'm a strong believer that we've hit this tipping point where technology, we've done CEO surveys and things like that. If we look at CEOs and boards, technology innovation is a top three kind of board priority across industries. And that's a recognition that this is not a small thing where I'm just shifting used to be a cost point. It was like, "How much of my revenue am I spending on IT?" and you're trying to minimize this. This is now fundamentally shaping winners and losers.

So, if I pick that insurance context, I think everything from claims done with generative AI, interpreting photographs, and taking transcripts, taking a voice interaction so that claim filing is done almost human-free if not completely in a much more delightful way, so that the – , what you expect of your best agent today is consistently the norm for that insurance company, or pick your industry domain, I think it's kind of very little labor expense spent on executing your best all the time. And then, I think the rest of the customer experience is going to be delightful and highly efficient driven by this technology.

So, I think, yeah, if you think of why does a customer choose an insurance company, it's ease of signing up, contracting, understanding what you're buying. That's going to be driven by generative AI. It's going to be showing up at their best at the time that you have to make a claim. And that's a stressful period in that customer's life. If they do that well and have delightful service, that will drive loyalty. So, then the companies that do that are going to operate at a much more efficient economic point. So, they'll just be much more successful businesses for their shareholders. So, yeah, I'm a big believer that we're actually already seeing the evidence of that now. And in three to five years, the companies we look at as the leaders in their spaces will be the leaders in innovating with Gen AI as well.

**Mike Kavis:**

I totally agree with that. Yeah, it's just in our day-to-day, whether it's at work or at home, everything has a tint of Gen AI on it. All of our office products are inherently having it, all the tools that we use both in work and play. And I started thinking, "What is a website that I go search for words and have a site map?" I think that will be dead. It's more going to be an interactive type thing. So, what's the future of the interface. I mean, are we still building websites five years from now or are we talking to bots or where do you see all this heading?

**Roger Premo:**

At IBM Ventures I get a great vantage point on that, just seeing a bunch of early-stage innovators. And we use this notion of AI thick and AI thin. But AI thick, first of all, I think there's a bunch of categories in which you will see Gen AI deeply into the workflow and it will transform how we work. And so I think the easy ones that you see already happening, if you look at code, if you look at legal, if you look at accounting, it's very clear that where you've got a really well-structured language by which you do the business and really great source of truth of training up what is a good accounting document or a good piece of code, things like that, there's great training sets out there that have real structure to them. So, I think those categories, you're going to see the work in those categories completely transformed. And if you're not adopting it you're truly falling behind.

And then, in the interface, this AI thin, I think that's what we refer to as the new UI. I think five years from now there's still web interfaces, but I think much, much more of our interaction is conversational. And we see it in a bunch of application categories. If you think of how much a knowledge worker spends in an ERP system or a workforce management system, just clicking a web interface to get to data that they need, it's like a dozen clicks to mine down to the location that you can get the information you need. I think the future is much, much more – it's a query interface, maybe a quick one or two clarifying questions from the Gen AI, and you're off and doing your work. And I think that that will become a norm.

And I would say one other thing inside of IBM, we're using, like I said, a lot of this technology and with IT support, if it's our HR transactions and things like that, we're leaning into it. We believe that actually learning how to use this now and getting fluent on how to make the Gen AI help you with your work on a day-by-day basis is an important professional skill to build out, just like maybe a little bit at the very front end of my career, but it's like as people move from paper to e-mails, or maybe it's from e-mails to Slack and messages, this is a new way to drive. This is how a professional has to interact with technology to get their job done.

So, for everybody listening, I'd say lean into using some of the chatbots in your business because some of them won't be perfect experiences but, one, your dev teams can learn from your feedback on that and, two, over time we're all going to have to interact with one of these interfaces to get our work done, that's going to become a huge part of our day. So, start building those skills now because I think they are going to be a major part of your workflow. I'm not willing to say the website is completely obsolete. I think there's a place for quiet reading and information discovery out there, but it will be much less of the time we spend every day.

**Mike Kavis:**

Yeah, great answer. I agree with that. My lifelong dream of watching *Batman* is to just sit there and ask questions and get answers. So, we're getting closer to the Batcave, you're saying. Yeah.

**Roger Premo:**

I like it.

**Mike Kavis:**

Yeah, so great conversation. We're going to have to get you back in a year when all this has changed and see how we did and talk about what's going to happen five years out from there, but stuff's moving really fast. So, if you have white papers or if you're on socials, where can people find you to learn more about what you guys are doing here?

**Roger Premo:**

So, first of all, I'm on LinkedIn, Roger Premo. So, check me out. I post often on the topic. I'd encourage everybody to check out the white paper. Some of the IBM team helped, but it really was a great Deloitte team that drove it. So, "Are You Ready for Cloud's Third Wave?" is a great read on this that gets from everything that we've talked about, about the business necessity to this, and then all the way through to how to get started. So, I encourage people to check those out. And I'm always open to a conversation on LinkedIn to explore these further.

**Mike Kavis:**

Awesome. So, that's it for today's podcast. Make sure you like us, leave a review, and subscribe. You can also check out previous episodes wherever you listen to your favorite podcasts. You can always find me on Twitter, Madgreek65, or you can reach out to me directly on e-mail, MKavis@Deloitte.com – while we're still using e-mail. Feel free to write me with questions, what you want to talk about in future podcasts. And thanks for listening to the On Cloud Podcast. We will see you next time. Thank you.

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