CHRIS COPELAND, ACCENTURE FEDERAL SERVICES & MARK KIM, MSRB | AWS RE:INVENT 2021, 12/2/21

VIDEO TRANSCRIPT

(upbeat music)

John Furrier: Hey, welcome back everyone to theCUBE's coverage of AWS re:Invent 2021. I'm John Furrier, your host of theCUBE. We've got two sets on the show floor, it's a virtual event, we've got the hybrid stream going, check out all the content we're here for wall-to-wall coverage. It's all been about data, cloud transformation, culture change, and making things happen. I got a great segment here with Accenture, Chris Copeland, CTO of Accenture's Federal Services, and Mark Kim, the CEO of Municipal Securities Rulemaking Board, also known as the MSRB. Welcome to theCUBE.

Mark Kim: Thank you, John, it's a pleasure to be here.
John Furrier: Thanks for coming, first of all, explain what the Municipal Rulemaking Board does, so people know what it is and we'll jump in.

Mark Kim: Sure, thank you, John, for the opportunity to have this conversation, the MSRB serves as the principal regulator of the $4 trillion Municipal Securities market. So Municipal Securities or muni-Bonds as they're most commonly known, finance the majority of this nation's infrastructure from the public schools

that educate our kids to the hospitals that care for our sick. Muni-bonds even finance the airport that we flew into to get to this conference. But in addition to writing the rules that regulate this market, the MSRB also provides the technology infrastructure that supports this market. So, in addition to being a financial regulator, the MSRB is also a technology company and we saw the future of technology and cloud computing and that was our decision to embrace that future and to move the MSRB to the cloud.

John Furrier: Correct, and obviously, Chris, this is critical infrastructure, you're talking about, legacy, has a lot of legacy as well. A lot of data, money's involved. I mean all the wrappings of transformation stories there.

Chris Copeland: Yeah, and it's great. I mean, the MSRB and Mark in particular really had the right mindset of understanding that, we all talk about migrating to the cloud. That's really just the beginning. Like it's really about once you're in the cloud, the aperture that opens up for the art of the possible and what you can really do. And the MSRB is like right on all of it, right? It's all about data. It's all about transformation, but I think the key for that transformational success that we've seen, is understanding that

the organization needs to change too. And that we need to enable that organization to really be productive and deliver on that mission in a cloud first world.

John Furrier: Well, Mark, I want to get into this 'cause this has been a big part of my reporting this past year during the pandemic and maybe the year earlier. I saw the public sector in particular really forced it to change.

Chris Copeland: Yeah.

John Furrier: Cultural shift instantly, they had no choice. It was a forcing function and there was the haves and have nots, the ones who have done the work, put their toe in the water, invested in some technology, knew about cloud and then ones that weren't, and they were thrown in the water. They had to figure out how to swim very quickly. So take us through the importance of that because we heard today and even in the keynote with Swami on stage from Amazon saying governance could be an enabler, not an inhibitor. So you're in this world of obviously muni-bonds, I'm sure there's a lot of compliance involved. So, take us through the journey, how you guys changed the culture? What was the outcome? Take us a quick highlight on the whole process.

Mark Kim: Absolutely, so, for the MSRB, the cloud migration was always about way more than just moving our applications from our servers to AWS's servers. This was an opportunity for the organization to put in place a cultural transformation. And that's the power of this opportunity for the MSRB. We were able to make a commitment to our people, which we did right at the outset, that we were going to bring all of our people with us on this journey to the cloud. This was a major investment in re-skilling and retraining our staff. We didn't have staff who had experienced migrating applications to the cloud. We didn't have software engineers who had prior experience working in cloud native environments.

We trained them and we made that commitment to do that and to bring all of our people along. And that has enabled the MSRB to create a culture of innovation, of teamwork. It also allowed us to break down some silos within our organization. Not only within the IT organization, but between IT and business, it was a transformational opportunity.

John Furrier: I mean, effecting change is hard, what was the learnings? When did you realize it's working?

Mark Kim: So having completed the migration itself, one of my fears was we've just literally spent millions of dollars investing in our staff, re-skilling and retraining them. We've just gone through a very technical, highly complex migration. These are people who are in high demand. Not to mention that AWS decided to put HQ2 right outside of Washington, D.C., announced plans to hire 10,000 people over the next 10 years. So I was worried on the other side of the migration that we would have a talent drain, and the best proof that I have that we've got our cultural transformation underway and going in the right direction is we didn't see that brain drain. We have staff that want to stay at the MSRB, that are excited about being able to continue to learn about new technologies, staff that are excited to be kind of on the cutting edge of financial regulation and being a part of building the future of the MSRB.

John Furrier: Okay, there's a purpose there, I mean, I think this is, this highlights this whole conference here at re:Invent. I was just talking to someone off camera during lunch and like, it's an Amazon learning conference as they say that their humble is learning, but it's also a thought leadership conference because they're introducing new stuff that's actually like, it gets the juices flowing and you're like, wait a minute, I can do more things. So, it's got that kind of conference, TED kind of vibe to it, plus it's real. Chris Copeland: I think that's one of the best benefits that we saw as part of this program that,

and we talk a lot about how to infuse innovation into the fabric of your DNA and organization, and I don't think that personified itself anywhere that I've seen as well as at the MSRB. Mark was talking about people wanting to stay and work there. I'll even, I think he's understating it.

People were excited about the process–

John Furrier: Yeah, they want to come to work every day.

Chris Copeland: There was competitions going on, on who was going to get certified. There was challenges about who's going to learn the most cloud and that desire to really continuously improve and bring those new innovations was unparalleled that I've seen. What Mark and the MSRB don't have the luxury of just keeping pace with those that they regulate. They've got to stay ahead.

John Furrier: Yeah.

Chris Copeland: And if you're going to stay ahead, you've got to have that innovative culture and you've got to take change as something that isn't this big mountain to climb, but something that's actually exciting to do every day. And I think it really, really came out in the program here.

John Furrier: That's one of the things I think it's one of the smartest moves you can make and I think you've made it, by getting the people on the right wave of technology is a retention bonus.

Chris Copeland: Absolutely.

John Furrier: It's not just keeping them happy 'cause if you're working on cool stuff, it's fun.

Mark Kim: Right.

John Furrier: But if you get them on the right way where they're constantly learning, and then they've to be a part of something.
This cloud migration, I think that's a real

retention thing. Do you agree, you've seen the same thing?

Mark Kim: Yeah, absolutely. It's such a motivator to know that our staff is front and center leading the charge in transforming the MSRB. Not only culturally but also digitally.

John Furrier: Yeah.

Mark Kim: And bringing us into the future.

John Furrier: Okay, so I got to put you on the spot because I'm want to put my evil genius hat on for a second. Okay, I want to make money, I'm a FinTech arbitrager, I want to get in and work the muni-bond data angle, obviously worry about, you've got a lot of oversight, governance, regulation. Can you move fast enough to protect the data to make sure things are stable? Take us through that because there's a lot of money involved talking about like a serious part of our economy and a financial system.

Mark Kim: Yeah.

John Furrier: It's critical infrastructure.

Mark Kim: Yeah.

John Furrier: So, you got to also have that balance of innovation and compliance and governance without getting in the way.

Mark Kim: Absolutely.

John Furrier: Take us through how you handle that.

Mark Kim: Absolutely, as a financial regulator that provides the market with its technology infrastructure, failure is not an option nor is falling behind the times. We have to evolve with our evolving market. And the pace of change is moving faster and faster. If you look at today, what's different about the MSRB being in the cloud than route being on-prem in our data centers, for our stakeholders, we don't have customers as a financial regulator, we have stakeholders, the entities that we regulate and

the entities that we protect. Our stakeholders will see systems that are more available. In the first 12 months of operations in the cloud, we achieved over 99.98% system availability. Performance has improved in our own internal benchmark tests, our systems are running 30% faster than they were and then finally, our systems are more secure. This is a hard one to quantify or to explain or to kind of deliver to customers, but I –

John Furrier: There's no ROI conversation when you've been hacked.

Mark Kim: Exactly, I am –

John Furrier: It's only a disaster.

Mark Kim: But I am confident that our systems are more secure today in the cloud, than they were on-prem in our data centers.

John Furrier: Yeah, Chris, this is a huge thing. I'm not going to rant a little bit, I'll do a side rant, but everyone who watches theCUBE knows I'm kind of a digital hawk. I truly believe that the red line needs to be changed because we are being attacked at a cyber level and almost like the, I get to see people being excited to work there because it's almost like the military, you got to protect. There's so much downsized, not so much justification of ROI. This is critical infrastructure, financial systems and databases. And there's no government forces to protect you.

Chris Copeland: I mean, Mark said it well, failure isn't an option, right? And I think what we're seeing and why everyone is really rapidly moving to the cloud is you cannot get that level of cybersecurity, you cannot get that real time information access, and then run your models to look for trends of where the threats are maybe coming from, and proactively address those threats. You can't do that in a legacy infrastructure model on-prem, you've got to embrace the power of the cloud and the services that the AWS cloud provides to be able to truly try to stay ahead. I mean, you have to bring that innovation every day in your lunch bag and say, how are we going to use these tools that only the

cloud affords us to bring security to the forefront?

Mark Kim: And John, can I add on that point? 'Cause I think it's an important one around security. In the legacy environment, in our data centers, the MSRB was handling security by ourselves, and I think one of the biggest lessons learned for us is pick your partners carefully.

John Furrier: Yes.

Mark Kim: We chose AWS and we chose Accenture Federal Services and we've now tripled our investments in security, both what Amazon is investing in their infrastructure, we've also have AFS providing managed security services for the MSRB in addition to our own security team. So we've literally tripled our security.

John Furrier: It's interesting and I think that's one of the reasons why you mentioned the retention thing and why people are happy is, it attracts a certain kind of individual to work there. It's the elite tech athlete, we call them, because they like, want the action, the young kids there, they want the tech, they don't want to be boring. So, what better wave to ride when you know there's a lot to protect, again, back to the cyber, this is huge cultural shift in the new generation coming in versus the old IT. The old IT was okay, we're operational, keep the lights on, add some servers, now it's like a lot more is at stake.

Mark Kim: Yeah.

John Furrier: Okay, great, I know we don't have a lot of time left, but I do want to get the data question. I have to ask you, you're a data company as well, you got to watch the data, what's the vision on data? How are you looking at the data with your team?

Mark Kim: So data is the future of the MSRB and we will remain a financial regulator and write the rules that regulate this market, that's our core mission and we will always do that. We will also always be a technology firm that provides the technology infrastructure for this

market. But in the future what the cloud has enabled us to do is to become a data company. We serve as the central repository of market data for this $4 trillion market. And we now, thanks to almost infinite scalable computing power storage, we now have the ability to leverage cloud tools like artificial intelligence, machine learning, to actually get at and unlock insight from the vast amounts of market data that we have and deliver that to the industry that we regulate and serve.

John Furrier: And you guys have so much headroom because Chris, with Graviton3 and the Stack, you can actually write the apps built for the performance, for your needs.

Mark Kim: That's right.

John Furrier: For the data needs, 'cause that's your advantage.

Mark Kim: That's right.

John Furrier: Yeah, it's just incredible. I just find it like, I haven't seen anything like this since the shift from client server to inter networking back in the 90s where you saw a C change of capabilities just completely change over, it's been pretty incredible.

Mark Kim: Yeah.

John Furrier: Okay, final word. Just re:Invent, what do you guys think?

Mark Kim: This is my first business trip since the pandemic started and it's fantastic to be with people, to see people to do this in person instead of virtually, so thank you for this opportunity.

John Furrier: I know, I felt so amazed. Chris, what about you, what's your take?

Chris Copeland: It's wonderful to be here, it's great being back, back out in the world I guess.

John Furrier: Yep.

Chris Copeland: Getting to meet with Mark, where we're not looking at a screen at each other, meeting with peers, but also just the collaboration and innovation you're going to get in an environment like this and the energy that it brings, you just can't match that. So it's been a great show so far and I'm looking forward to the rest of it.

John Furrier: The phrase I hear a lot on theCUBE, also I say it a lot, a kid in the candy store 'cause there's so much coming out, just the capabilities, you're starting to see more ease of use, more infrastructure as code now, data as code, a lot of great stuff, all part of the cloud transformation. So great for coming on and sharing the story, Mark, I appreciate it.

Mark Kim: Thank you, John.

John Furrier: It's good to hear about your awesome program, Chris, thanks for coming on too.

Chris Copeland: Yep, thanks for having us.

John Furrier: Appreciate it, okay, Cube Coverage here in Las Vegas. I'm John Furrier, you're watching theCUBE, the leader in global tech coverage, thanks for watching.

(upbeat music)