

Barefoot Innovation Podcast with Jason Cave, Deputy Director, Division of Conservatorship Oversight and Readiness/Chief Fintech Officer, FHFA

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Jo Ann Barefoot: Our show today is so special. My guest is Jason Cave, who is deputy director of the Federal Housing Finance Agency, FHFA. And we are at a conference in New Mexico in Santa Fe in a very beautiful place and have spent a morning of very thought-provoking conversation. So I'm extremely delighted to welcome you to the show. Jason, thanks for being here.

Jason Cave: It is great to be here in Santa Fe with you and everyone else at Smoke Tree Jo Ann.

Jo Ann Barefoot: Thank you. So we have worked together recently. You are the leader of the fairly newly created FHFA Office of Financial Technology, and we're going to talk about that and we're going to talk about the role that you all are playing in the mortgage market on how to make mortgage finance work better for America's home buyers and for financial consumers. Before we turn to that, I want to ask you just to tell us about your own background. You have a very long and illustrious background in financial regulation.

Jason Cave: Sure. Sure. Happy to. And I think I would be what you'd call the accidental FinTech lead or head if you look at my career and a lot of my friends and family are scratching their head still. I just celebrated 30 years as a federal regulator. Spent most of it 27 years at the Federal Deposit Insurance Corporation. Started in the mid 90s as an examiner in Connecticut. Dealt with closing and just dealing with the real estate mess of New England back then, and then moved to Washington and got into policy work. Spent a good portion of my career working on Basel international capital Standards, policy issues. I worked for Sheila Bair during the financial crisis and was heavily involved in those Sunday night, how do we get everything ready for the Asian market open and having to come up with crafting some emergency responses in short order with a lot of other smart regulators in town.

Learned a lot through that. And it's shaped a lot of my post-crisis career. So I spent a lot of time after that putting in the resolution regimes and the capital standards so that we hopefully don't go through something like that again. So I did that, worked with FSOC and the designations process and throughout most of that period, I would say I was somebody who had a strong skepticism to innovation and models. I saw that in my view, these were things that could be manipulated, things that would be difficult for regulators to keep pace with. And my view was better than to just not allow them. So because they're so difficult to keep pace with, let's just limit it. And that was my view. I did see a lot in the financial crisis that I think supported that. But leaving the FBIC and coming to

the Federal Housing Finance Agency a few years ago, I've had a broader portfolio and part of that was picking up or creating a financial tech office, FinTech office direct, and that's changed things a bit I would say.

Jo Ann Barefoot: Yeah.

Jason Cave: Yeah.

Jo Ann Barefoot: Before we talk about the office as you know, we have a global audience, just give us a few words on what the FHFA is, what it does.

Jason Cave: Right. So the FHFA relatively new agency, it was created, geez, right before the financial crisis. And its main job is the regulator of Freddie Mac, Fannie Mae, and the 11 fellow home loan banks. So very much housing focused. And again, so it's similar to other regulators. We have a safety and soundness examination force, a policy group. What's a little different is that Fannie and Freddie are in the government conservatorship and they've been in that almost the entire existence of the agency. So that's what I would call something different than what other regulators have. So in addition to our supervisory and policy work, we have a conservatorship function. I head that up and work directly for Sandra Thompson to make sure that the enterprises are running themselves in a way that's consistent with the conservatorship mandate. And so that's a little bit different than what you'll see at the FDIC, FED or other organizations.

Jo Ann Barefoot: And Sandra Thompson, the director, is also a lifelong financial supervisor.

Jason Cave: Yes.

Jo Ann Barefoot: Very deep expertise.

Jason Cave: Yes, very. Sandra worked for her at FDIC and she ran the supervision division, which was probably about 3000 examiners through the financial crisis. And so that was quite a task so.

Jo Ann Barefoot: Yeah.

Jason Cave: Yeah.

Jo Ann Barefoot: So tell us about the Office of Financial Technology and the innovation initiative that you have launched. Why did you think it was needed and desirable and how have you gone about it?

Jason Cave: Great. Yeah. So early when Director Thompson took over as acting director mid 2021, we started to see things of mortgages backed by crypto or interesting offerings being done in the mortgage space. And like a lot of principals, the director had questions like, well, is that allowed and how is it done? And not a lot of expertise, in-house expertise on it. And she started to say, I noticed that at

FSOC, a lot of the other agencies had these FinTech offices and she asked me to talk to people in town, and a lot of these people I'd worked with, to get a sense of whether they saw the value in this, whether we should endeavor in something like this.

So in talking to people at OCC and SCC and CFTC, definitely got a sense that these offices offered significant value to policymakers to be able to understand how the technology worked, how the regulated entities were using it, what the challenges were, what the risks were. And to have this as something separate from the traditional supervisory and policy functions to allow a group to kind of go unfettered and go deep. And so after understanding that better and looking at our structure, we decided that this would be something worthy of our committing to.

Jo Ann Barefoot: And you're focused heavily on how technology is changing the mortgage marketplace, and then you're also interested in the question of how technology could improve your own functions and the functions of the other players in the mortgage market on the public sector side as well.

Jason Cave: Yes, yes. So we found with mortgage, and I think this really became another reason why we wanted to open the office, was that while there had been over the past 10, 15 years, significant mortgage tech investment, a lot of companies in this space, if you look at a map, there's a 100 fintechs of different sizes doing something in the mortgage space, you would get the sense that probably all the innovation has happened. And then we started looking at the facts. It's always good to look at the data and the research, and it was stunning to me how over 10 years it hasn't changed. It took 45 days on average to close a mortgage 10 years ago and it's about that today. The cost associated with closing a mortgage had doubled over that time. So when we looked at that, we're like, well, this is not normally the case for innovation working. So something here is going on.

So we really wanted to start with looking at where has technology made an impact in mortgages and why, so that we could also understand where it has not had a chance to make a difference and why not. And to really look at those spaces and say, how can we come up with a more efficient process? Because the cost issue is a major factor in access and clearly part of our mission is to help those that have the resources but are not able to access it, get that. And with closing costs hovering around 13,000, that's a major barrier for people that actually could benefit from it, but can't get off to first base because of those very large fees. So really finding out how can technology help us there. And that's been, we've started there. That's a pretty big topic, meaty topic. So we're continuing to really try to make some progress in that area.

Jo Ann Barefoot: And so we at AIR have had the opportunity to work with you and your team, which has just been fantastic. And one of the things that just happened is that you put on your first tech sprint last week, which was an enormous success, very exciting. Talk a little bit about why you were interested in doing, maybe just

saying how it works. A lot of our listeners probably know, but a lot probably don't. Kind of what a tech sprint is and how we went about this and what your thoughts are on it.

Jason Cave: Well, I knew what tech sprint was the way to go when Jo Ann, you described it as a way to deal with intractable problems.

Jo Ann Barefoot: Yeah.

Jason Cave: And as we got the office going and started to talk to people about why it was so challenging to make inroads in the mortgage space, intractable clearly began. I said, well, that sounds like this is exactly what we have here. So many people I talked to all had reasons why mortgage was still so inefficient, but everybody was quick to say, but I'm moving my piece in a good way, but it's somebody else in the value chain. And one of the things we found is that value chain in mortgages is very long. Everybody has a little piece of something and everybody thinks that they're doing just great. It's someone else. And so I quickly came to the conclusion that bilateral discussions were not going to get us very far. If we were really going to come up with some solutions in the space, it had to be a lot of collective action.

And I've been involved with some of that over my years in the government. Conferences, they don't get at it either. You have to really have people that feel accountable, empowered to come up with actionable changes. And this seemed like the right format from what I'm talking to people that have been involved in tech sprints, talking with your team, this seemed like the type of thing where we can come up, we have concrete problems, statements, and that we should be able to come up with some concrete solutions. And again, we've just finished. The tech sprint was just terrific. The enthusiasm from our 80 participants, the ideas that they came up with, there are a lot of good winners in there. Now the challenge is rolling up our sleeves and seeing what we could get accomplished in the short term, medium term, and then some of the moonshot ideas.

Jo Ann Barefoot: Yeah.

Jason Cave: So yeah, it was great.

Jo Ann Barefoot: Yeah, we did have 10 teams and we gave them broad problem statements to tackle and the teams are designed to combine skills. So we have domain experts, deep experts in mortgages and so on, and also tech people at the same table working on solving the same problem at the same time, which is part of the magic of it.

Jason Cave: Yeah, we really, just have to say a shout-out to the participants. They went through the forming and storming and norming in a really professional, enthusiastic way. I wish I could bottle that.

Jo Ann Barefoot: Yeah.

Jason Cave: They really, just really, and the concepts that they were able to come up with in a short amount of time.

Jo Ann Barefoot: Yeah. They had about two and a half days to work together. Yeah.

Jason Cave: Without a lot of prior relations. Some of these people know each other. I mean, it was really amazing. I was really impressed so.

Jo Ann Barefoot: I was too. It was incredible. And I will say, we'll put in the show notes a lot more detail about the tech sprint itself and about the office. So people can come to find that at regulationinnovation.org for this podcast episode. But was there anything that surprised you or really struck you coming either about the process or about the solutions that the teams came up with?

Jason Cave: Well, yes. First it was, your team was very helpful in the beginning by saying, we really want to make sure we get the problem statements well crafted, well-designed, well thought through, and we have to start there. And at first I was like, oh, the problem, that'll be easy. And it wasn't, but it was well worth taking a lot of early time to go through it and really hone those down. I understand why your team made that such a priority because if you don't have well-thought-out problem statements, you're going to have a hard time coming up with solutions. So I think we did a good job there. I was really impressed. I thought for this sprint we would get a lot of process related solutions of just move step five to step two. And I thought there'd be a lot of that, which would be helpful.

But I was really surprised by the, we got a lot of product ideas and just really people not just working off the current narrative or just making some incremental changes. There was a lot of ideas of how would we do this if we started from scratch, which I think I was pleasantly surprised by because we do need, my view is there's got to be some base hits. There's got to be some things that we could do in the short term to move the needle, but it's also we've got to have in the reserve some longer term ideas that are more fundamental. Are we going to do those right away and make all those changes? Probably not, but we actually need to have those to help with our roadmap because some of the solutions are going to be challenging. They're going to involve more actors, they're going to involve people that are very comfortable with the status quo and all that. So you have to really build to it. What I like about it is we've got solutions that really cover all of those different phases. So I was really pleasantly surprised by that.

Jo Ann Barefoot: I think you also come out with the nucleus of a community of people that are motivated, excited, do have a lot of the necessary perspectives and kind of positioning to be able to take some more steps together which,

Jason Cave: Yeah.

Jo Ann Barefoot: Is really valuable.

Jason Cave: Yeah, I was very lucky. Lisa Rice and her organization, just a couple of weeks.

Jo Ann Barefoot: National Fair Housing Alliance. Yeah.

Jason Cave: Yeah, National Fair Housing Alliance. Yeah. They put together a tech sprint just a few weeks before we did. I was asked to give closing remarks, which was quite an honor, and got to see how some of the teams came together on that. And really the idea of these people leaving and forming accountability groups, really staying together, you could see leaving that event that was going to happen.

And I think we'll have the same as well. These are, almost like sometimes a summer camp. These are people that will hopefully remain pen pals and continue to say, Hey, what are you doing? Once you get on the plane and you go back to all those emails and all that, what are you doing to keep it going? And part of what our job is going to be at FHFA is to continue to check in. And one of the first things that we're going to do is deep dives with the teams to say, if you had more time, tell us a little bit more now,

Jo Ann Barefoot: Yeah.

Jason Cave: That we're excited to do that as our next step to really tease out where there's the common threads in some of these to see where we could make some changes.

Jo Ann Barefoot: One thing that struck me there was in your opening remarks, you talked a little about your own history as a bank examiner and talked about the fact that when you started the process and the tools were pretty primitive, right?

Jason Cave: Yes.

Jo Ann Barefoot: Just share that with us.

Jason Cave: Yes. It's 30 years ago. It's amazing. When I first came to the FDIC, they had just started doing the examinations on the computers. I mean, they were doing the examinations on the Hermes just a couple of years before. I think email was just introduced right around when we started. And when we would do loan reviews, we'd review the credit files to make sure that the loans were in good shape. And of course in Connecticut at that time, most were not, but you'd have to go through and review and see where the risks were, where the losses were. It was a very manual process from the surveying or scoping the loans you reviewed. Everything was very manual. And as I remember writing everything out in these line cards, pen and paper, and again, it wasn't that long ago.

Jo Ann Barefoot: Yeah, I mean, you and I were both in our working careers.

Jason Cave: But we did. But by the time I had left the field in 99, we had these automated tools that were in their day game changers. They allowed us to bring in the actual data from the banks, and then we were able to scope. An examiner could say, going into the next exam, I want to pull newly originated loans in this particular area. And you can get that and you could pre-plan and also not spend all this time writing everything out. It would get pre-populated. There were bugs in the systems and sometimes it was frustrating and sometimes it seemed like couldn't it just be easier to write it out?

Jo Ann Barefoot: Yeah.

Jason Cave: But I have to say and since then they've made considerable advances, but those were big ticket changes that not only helped with efficiency, but also with safety and soundness. And so when we talk about these innovations and sometimes in discussions, everyone's like, well, it's this or that. It's efficiency at the risk of safety and soundness. But I think that was an easy early example of one that met both.

Jo Ann Barefoot: Yeah, that's part of what excites me so much about the digital age opportunities here is there's a lot of opportunity to get better and cheaper at the same time, which usually is you have to pick one or the other so.

Jason Cave: Yeah. Yeah.

Jo Ann Barefoot: The FDIC said a few years ago that they had calculated that they spend 400,000 hours per year on data entry functions where the field examiner is entering data into a spreadsheet to be able to work with it. And so as we continue to improve that tech and the data available to examiners and how easy it is to access it, the better we'll be able to do all of that.

Jason Cave: Yeah.

Jo Ann Barefoot: Let me ask you to talk a little bit more about the art, maybe it's the science and the art of bringing an innovation mindset to a financial regulatory body. It's not the easiest thing in the world to do, and that's not a criticism of anyone. It's these organizations. Yours is a young one. Many of the others, as you know, are very vulnerable old organizations, the FDIC and the Fed and the OCC's from the 1860s. But they're all built to be careful and prudent and essentially risk averse really. They're certainly aimed at risk management. And now you're trying to introduce new learning about technology and new ways of doing things and being more agile. And we have many, many regulators who listen to this show. What are your learnings so far or maybe your advice on this dimension?

Jason Cave: Yeah, no, and again, I come from it as somebody who was, when these FinTech offices were first opened, I think it's fair to say I was a bit of a doubting Thomas

oh, okay, what's really at play here? Now that I'm in charge of one, some of the things that I do and I'm hearing others do as well, is the benefit of having the office separate from the traditional safety and soundness and policy groups is there is greater freedom. I talk with a lot of people, I talk with lenders, I talk with vendors. In fact, we had somebody earlier today talking about the value of not just talking with the regulated entity, but those organizations that support the entities and to really get a better sense of the whole system. And mortgage is one of those. As I said, there's so many different players, there's so many different vendors.

Some of them have been around for a while, wouldn't call them young fintechs, but they're key. They house a lot of the technology. They work with the fintechs. There's so many different pieces of the puzzle. And so I've spent the past year pretty much talking with anybody. We talk about office hours. We pretty much have office hours all the time, and I'm constantly checking on LinkedIn and sending somebody an email saying, I'd love to hear more about what you do. And it's a low stakes, low risk, low cost way of just sort of understanding how the system comes together, understanding the players, understanding the challenges without sort of a supervisory or an enforcement as the backdrop. And so that's really helped. And just to be open-minded on what everybody talks about as the challenges, the problems, the solutions.

We found early on that one of the challenges in mortgage is not exactly the tech, but it's the adoption. It's the adoption rates. And I found that out by talking to a lot of people to say, there's some great programs that are offered, but they don't exactly work for how we're set up. And so our adoption is not as good as it should be. And so what that's causing us to do say, are there ways that we should be aligning and amending some of that tech to fit with it, or are there tools or are there providers that could make it easier? Because again, if you have these programs and you have the tech, but you don't have the adoption, you're not going to get the benefit. And that's what we spent a lot of time at this tech sprint. Some of the things that the enterprises have offered for years were really meant to revolutionize the process, really get to source documents to not have so much checkers, checking the checkers.

But again, we see that the adoption rates for these tools are pretty low. So it's like how can we really move those up to 50 or 60%? What's it take to do that? And if we can do that, how much does that move the needle on the cost of closing a loan and the time to close? So we're pretty excited about it, but we found those things out. We found those things by talking to a lot of people and asking the same questions to a different set of people just to see if we get similar answers. A lot of that type of, as I call it detective work, I like to put on my colombo routine. Somebody called me out on it once. It was pretty funny. But it's a way to really sort of get a sense of what are some of the commonalities that we're hearing from people. So I'd say one of the biggest things is you've got to be willing to talk to a lot of people to make these offices a success.

Jo Ann Barefoot: The issue of scaling these solutions in such as you say, such a complex and sort of sprawling market of large players and small players is so huge, and you all are positioned to do that. And the government sponsored entities do so much in terms of setting standards and setting best practice and expectations really for the whole mortgage ecosystem.

Jason Cave: Yeah, yeah. Well, that's what's in some ways, I'd say maybe for FHFA it's a bit easier because we're dealing with Fannie and Freddie who do establish standards. So that's a benefit. What sometimes makes it a challenge as well is that also raises the stakes and it raises the stakes on experimentation. Because they're standard setters, getting it wrong has big consequences.

Jo Ann Barefoot: Yeah.

Jason Cave: So striking that balance is key. But once you get that momentum, and I think one of the things, the enterprises they're already doing with some of the cashflow underwriting pilots, bringing in rental payments. I mean, those were things that were unheard of a few years ago that are now finally getting some momentum. And it's huge. It's game changers once they start to be able to do that. What we want to make sure is how to make sure that is something that can be frictionless for the bulk of consumers and lenders. So it's great to be able to do it, but we want to make sure that the technology is there in a way that they ensure that adoption is there for anyone that has the ability to say, I've got this rental history and it's a key indicator of my credit worthiness that's not shown elsewhere, and I want to have that brought in. So we're really excited about that.

Jo Ann Barefoot: Yeah. You showed a video that was very inspiring at the event, and it included the potential for using more data to get a fuller picture of the applicant's ability to repay the loan, and also tying in the role of homeownership in building intergenerational wealth, closing the racial wealth gap. If we can get, we meaning the whole system, get really, really good at accurate underwriting with much more data than ever could have been used even a few years ago. It transforms everything.

Jason Cave: It does. And one of the, a word that Director Thompson uses is sustainable. It's important that we're talking about access for those that will be able to stay in the home through good times and bad, not just to get a bunch of people into homes. So I mean, it's very important to focus on sustainability and again, what are the challenges? What's blocking those that can show that throughout the cycle and where technology, and we're looking at this across the board, not just technology. The equitable and sustainable plans, they're much broader than that, but I think we are all learning that technology and related innovations hold an important role here, an important key here.

Jo Ann Barefoot: My last question is, do you have any insights thus far on how to help your own organization sort of travel this innovation journey? Some people pick it up immediately. I don't know if you've observed this. I sometimes feel like the

young people are very quick to get it, but there's changes in culture, in training and education and so on. Any thoughts in that realm?

Jason Cave: Well, I think clearly the tech sprint has helped. A, we were able to bring on a bunch of people to help on detail. And so that really got some excitement outside of just our group, which is always good, and excitement is contagious. So they go back to their organizations and people say, Hey, how do we get involved? So that's key. We've been having a FinTech leaders series where we bring in people like Delicia Ann and Melissa Koide and others to come in once a month, we go over a topic. We had Schmulik Fishman from Argyle came in and others just to talk about their products or what they're working on. We get about 150 people at lunch to tune in.

Jo Ann Barefoot: That's great.

Jason Cave: And so that's a great way. The other thing is, one of the next areas that we're going to dig into is with artificial intelligence and machine learning, and there's a lot of great use cases there. I think also from an examination standpoint, the quality control, that's a big part of the work that we do at FHFA, really making sure working with the enterprises at the loan quality. I mean, at the end of the day, we're guaranteeing these that it's solid. There's so many tools that it can help us. So we want to work with the teams to really, to help them give a little bit of sense of which ones are actually worth looking at closer, potentially using. So I think as we get into some of those areas, that's going to get people excited as well. But it's a process.

Jo Ann Barefoot: Yeah. Something that you've prompted me to mention by talking about your guest speakers is that the tech sprint was accompanied by a conference for the beginning and the end, and some sessions along the way. John Hope Bryant from Operation HOPE spoke very inspirationally. And then you had a lot of other really important leaders from across the industry, the advocacy sector, and it was really, really,

Jason Cave: Yeah. John Hope Bryant.

Jo Ann Barefoot: Exciting.

Jason Cave: It was just, what a kickoff.

Jo Ann Barefoot: Yeah.

Jason Cave: He just got everybody psyched. We had Lisa Rice, Alicia Hand talk also about what they're doing.

Jo Ann Barefoot: That was my panel.

Jason Cave: That's right. It was expertly moderated,

Jo Ann Barefoot: There we go.

Jason Cave: By Jo Ann. And then we had some great panels. One of them that was a lot of fun to put together was the venture capital, and that's a group that I've also spent a lot of time with. My view is that these are the people that put their money at risk. So they'll have some good thoughts on where they see FinTech going, what companies, what sectors. So we've spent a lot of time with them and it was great to have a panel with them as well as just some founder stories. Some of the stories of these companies, these were people that came to this country and without FICO scores and without all of that. And so they built products based on the struggles their families dealt with, and those are pretty compelling stories. So we had a panel with the Isuzu folks and [inaudible], so we were, lot of different panels, but people really enjoyed that.

Jo Ann Barefoot: Yeah. And again, I think so much of the magic is bringing in people who are working in this ecosystem in different spots and just sometimes don't spend that much time directly together. They got to know each other. They learned each other's problems. So as I said, we will put more information in the show notes. There were three winning solutions, and we'll list those. And as more information develops around them, we can be adding that and there's going to be a report and more next steps. Is there anything I haven't asked you that you'd like to add?

Jason Cave: I think we covered it. I just wanted to thank you, David, the AIR team. You guys were terrific, and really could not have done it without you guys, and really looking forward to the next steps.

Jo Ann Barefoot: Well, thank you. It's been our pleasure and really so exciting to work with your team and with this challenge, this opportunity. There's so much opportunity to do better in this space and make a big difference for people. So thank you. So Jason Cave, where can people get more information if they want to learn more about what you're doing at the Office of Financial Technology?

Jason Cave: I say the easiest, just put into your browser. I used to say Google, but I'm not supposed to. So put in your browser. You put in FHFA FinTech office and it'll tell you everything you need. It'll get you to our website, and we've got a lot out there. FHFA has a YouTube channel. I found out, and I think I was told all of this, our events from last week are on there. So mom and dad, if you're listening, check it out and everyone else as well.

Jo Ann Barefoot: Fantastic. Thank you so much for being my guest today. It's been fantastic.

Jason Cave: Thanks for having me.