# PUBLIC SECTOR FUTURE Podcast – Rules as Code

Talent: Olivia Neal [host], Alex Roberts [guest]

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**Olivia Neal:** Hello and welcome to *Public Sector Future*. This is a show for anyone who cares about using digital approaches in the public sector to deliver better outcomes.

We will explore stories from around the world, where public servants have been successful at driving change. And we meet the people behind them, their first-hand experiences, and lessons learned. Throughout the series we will discuss technology and trends, as well the cultural aspects of change.

Today we’re joined by Alex Roberts, Deputy Head of the Observatory of Public Sector Innovation at the OECD . We’re going to be exploring new research, which is rethinking one of the core functions of government – rule making.

Whether legislation which sets out what tax we pay or what benefits we’re eligible for; or regulation which governs the how transportation is designed and operated – rule making has been a function of governments for hundreds of years and impacts all of our day to day lives.  But the way in which rules have been made and published has remained static. Is that about to change?

**OLIVIA NEAL:** Alex, welcome to the show.

**ALEX ROBERTS:** Thank you so much for having me, Olivia.

**OLIVIA NEAL:** Thank you for joining us. So, before we get into our discussion, I’m just going to give a little bit of background on what the Observatory for Public Sector Innovation and the OECD are. So, for those of you who haven’t studied your history recently, the Organization for Economic Cooperation and Development, or the OECD, was born in 1961, and it’s now got 37 member countries from around the world, and they’re really coming together to build better policies for better lives and provide a forum and a hub for people to share experiences, best practice, and to give advice on public sector policies and international standards setting. And, as I understand it, Alex, the Observatory for Public Sector Innovation is a pretty small team. You’re about 10 people, and you were set up quite recently, just back in 2013, is that right?

**ALEX ROBERTS:** Yes, there was preliminary work before that. But quite recently, yes, quite recently.

**OLIVIA NEAL:** And what is the aim of the Observatory for Public Sector Innovation? What types of pieces of work do you get involved in?

**ALEX ROBERTS:** Mainly, it’s to try and help governments take a more strategic, deliberates and systemic approach to innovation. How can they engage with change in a deliberate manner, rather than just being forced to react to do change? We’re really about trying to uncover the new, what’s emerging, how then governments take that new and embed and integrate it when it’s promising and make it fit with all the things they’re already doing. And third, how can we act as a source of trusted advice for governments as they go on their innovation journeys, and navigate all the difficult things that come up with innovation, whether you’re public or private?

**OLIVIA NEAL:** And it seems like that journey, and that focus is really getting a lot of traction, particularly in the last year. We, at Microsoft, we’re involved with a conference that you hosted called Government Aftershock, and I was just personally really delighted to see how many people, at very senior levels, from governments all around the world, were coming together to talk about the future of government, and really thinking about innovation and digital transformation, as really at the heart of that. That must be very kind of empowering and heartening for you to see this all coming together.

**ALEX ROBERTS:** Well, I think the last year has visibly and viscerally illustrated that innovation is not something that governments can leave to others. It’s something, if the world is changing, then what governments are doing will also need to change. It’s an ongoing process, and we have to get better at that. We’re seeing positive this year. Governments have done some things in remarkable and difficult circumstances, but we’ve also seen there’ve been gaps and issues where government hasn’t necessarily met its own ambitions or the needs of citizens more generally. And innovation is going to be a part of – of reducing that gap, I find.

**OLIVIA NEAL:** And I think, when we’re thinking about innovation, it’s the type of word that we hear used a lot in public sector environments. And, and I think often sometimes things that I hear be called innovation are really just kind of incremental improvements, or our governments using the types of approaches that other sectors are using, and I wonder sometimes about that use of innovation. But the topic that we’re discussing today, which is about rethinking rulemaking, and a subject called Rules as Code really is about innovation, because I think in my opinion, this is about fundamentally stepping back and thinking from the beginning about how do you rethink any process? So, can you just start by telling us a little bit about what is Rules as Code?

**ALEX ROBERTS:** Of course. So, Rules as Code is a new approach, but what it’s inherently about is drafting rules that are in a machine-consumable format, so that machines can not only decipher them, but potentially act on to make the decision pathways from that. It’s not just about output, of having rules in a digital form, but it’s also an approach and a process for making sure that the digital rules match the – the natural language laws and regulations and rules that we create through the normal rulemaking processes. How can we make sure that the versions are not only understandable and accurate – actionable by humans, but also by machines?

**OLIVIA NEAL:** And why is this an important topic to look into now? Why is this something that’s starting to emerge?

**ALEX ROBERTS:** I think there’s a lot of reasons and – and we should recognize that, you know, these aren’t new issues entirely. There’s been a lot of work going on for a number of years, by a lot of different fields, around how to make sure rules can be complied with more easily, how they can be acted upon more quickly, how they can be integrated into digital systems.

But I think we’re at a moment where it’s about saying, hang on, we need to take a more deliberate approach to this and think about how do we make sure that rules are, not only administered as efficiently as possible, but that the compliance with them is as efficient as possible? How do we free up a lot of the inevitable legal effort that goes into continually sort of going, what’s possible, what’s not within the public sector? How do we make sure that rules are being administered in an accurate and transparent way, and we can increase the challenge ability so that people have faith in whether these rules are being implemented in the right way? It’s also in part about trying to reduce the gap between what you intended a law to do and what it’s actually going to do in practice. And finally, I think it’s about, you know, as we enter a digital world, our rules become digital, you know, in a way. If we think about something like self-driving cars digital rules are going to become manifest in our world, and how we experience the world. It’s not going to be something abstract. It’s going to matter on our day to day. And so, making sure that those rules are matched with what we intended is really important. And that’s what Rules as Code is about.

**OLIVIA NEAL:** Okay, so really, to try and kind of summarize this and play it back, tell me if I get this right or not. What we’re talking about here is taking existing legislation and thinking about new legislation and regulations as they’re being developed and providing these not just in the language of the country that is writing them, but also in a code or a format that is interpretable, simultaneously by machines. Is that a fair interpretation?

**ALEX ROBERTS:** Yes, I mean, this is a new approach, and there’s still a lot of ongoing sort of negotiation about what exactly is true Rules as Code and what is not, but yes, it’s about how do we make sure that what write into human understandable laws is also machine understandable? How do we create or revisit laws in a way that means that, at the same time, we have those dual formats? And how do we reconcile those? And how do we make sure that – again, a lot of this is about making sure the intent is matched in the reality.

**OLIVIA NEAL:** And I think you’ve undertaken some research with the team at the Observatory of Public Sector Innovation, into this topic. And I was really interested by the approach that you took to doing this research, because I think your approach in itself is quite different to the types of normal approaches we see to research. rather than a more traditional approach, you took a very open and collaborative approach, which really opened it up for feedback, as you were developing.

**ALEX ROBERTS:** We’re trying to explore and understand what are the emerging issues? What’s involved, who’s been doing things in this space? What might the implications be? And what are some of the bits of advice that we can give from now? But it’s still very much an iterative, evolutionary approach. It was about going out to the broader community, starting to have those conversations about, well, who is doing what, what have you found, what worked, what didn’t? And making sure that we have an open process where people could submit, and then having a draft that anyone could edit and comment, and work through, so that we really make sure that we’re at the edge of what’s being understood. And we’re not trying to pretend that we’re absolute experts in this topic. There are some very deep technical issues. What we’re trying to do is translate all of that into something that’s understandable for your average public servant, so they can navigate this in their own work.

**OLIVIA NEAL:** So, I think that’s really fascinating because by taking such an open approach, you’re really bringing in that practical experience of people around the world who were who are using this, and who are experimenting and testing out. And so, for governments who are interested in exploring this type of approach further, it sounds like we’re very much in the pilot testing experimentation phase. Do you have a view on where is the best place to start for a government who wants to start experimenting with this approach, or seeing if it would work for them? Where would you recommend that they start that journey?

**ALEX ROBERTS:** I think it really varies. So, one of my favorite examples is the States of Jersey, they’ve been looking within the context of the drafting process for legislation. And they’ve just been introducing – well, they’ve been using Excel to map the different logic pathways. And if then, sort of pathways, just to make sure that the legislation itself is clearer, and therefore, more easily potentially translatable into this sort of thing, further down in the process.

I think the New South Wales government has taken it more from a transformation angle and digital transformation. In France, I think it’s come much more from the service delivery end, and they’re trying to make sense of all of the different rule sets, and how to best increase the efficiency and the transparency of that process, and make sure that what’s being delivered to citizens is matched by what the law says.

In New Zealand and Canada, the experiments have been more around, I think, trying to explore what this might mean, and what it could look like. So, I wouldn’t say there’s one set path for this. But it’s more about trying to give it a go, to think about, you know, what laws or rules might be best suited to this in your context, whether there’s an option to work with the legislative drafting areas, or the regulatory bodies or whoever. And as always, with innovation, it’s about going where there’s appetite, because that always makes this process easier, when you’ve got people who are willing to go along with you on it.

**OLIVIA NEAL:** And it sounds like, from that States of Jersey example, that there is potentially real benefit to bringing that engagement as far forward in the process as possible. And really, by having that conversation with the legal drafters, with the regulators, at the stage when new legislation is being developed, there are potential benefits to the traditional types of legislation, as well, in terms of improving clarity, reducing overlap, making sure that those logical flows really are there and are existing. So, that sounds like a really interesting place for people to start as well.

**ALEX ROBERTS:** Yes, definitely.

**OLIVIA NEAL:** So, we’re starting to see these kinds of incremental tests and experiments from some really forward-thinking governments. How does an idea like this go from being that dispersed pilot approach to actually being something that becomes more mainstream and gains more traction? Have you seen these types of changes happen before, or where might we expect to see this go next?

**ALEX ROBERTS:** It’s a big question. There’s a lot of different ways this sort of thing could evolve. I think governments are looking at how they can better legislate. And there’s a lot of work being done by different groups, including within the OECD, for better regulation, and so on, and more agile governance. But I think this approach has the advantage of being an underlying platform that could speed up a lot of the legislative process, which is one of the big sticking points I think people find in working with the government.

It doesn’t mean that it’s applicable to every law or that it’s going to be the right solution in all cases. We suggest in the report that, you know, this should be focused on things where there’s very prescriptive rules already, so that you have a very clear delineation of, no, this is just digitizing rules that are already very explicit. It may not be appropriate where there needs to be human judgment and all those other sorts of considerations. I think what we will see, and are starting to see, is some political engagement in this idea. The recognition that the status quo isn’t sufficient. We have been dealing with these issues for many, many years. And there have been different solutions. But I think what’s been missing, and what Rules as Code can provide, is that deliberate approach. It’s taking a step back and saying, if we’re going to digitize rules, then we need to digitize the rule-making process and working all the way back from that.

**OLIVIA NEAL:** One of the things that really kind of stood out to me in in some of your research reports as well was that, you know, government looks a lot at red tape reduction, but going back and back to red tape reduction is never really getting people to the outcomes that they really fundamentally desire.

So, this is taking a real step back and saying how do we really have our approach to rulemaking be fundamentally different? And that’s a big thing for governments to do to, to change the way that rules and laws have been made for hundreds and hundreds of years. So, I think it’s a huge step for people to start experimenting with and learning from each other.

**ALEX ROBERTS:** And sometimes it’s going to be deeply uncomfortable, because it is going to be challenging, and it is going to make us ask questions about, well, is that the best way of doing things when we’ve had traditions and practices in this space for many, many years, if not decades, or even longer?

**OLIVIA NEAL:** And have you had any challenges from people in terms of putting this approach forward? Are there people who feel uncomfortable about this already? I’m wondering whether, for example, people might worry that having rules available as code might make them more opaque to the man or woman on the street. Are you getting those types of challenges in your discussions?

**ALEX ROBERTS:** I think a common sentiment was a fear that this means that, if you digitize rules, make the machine consumable, then everything will be then automated, and the human agency will be taken out of this. I think there are two aspects to that. One, again, it’s already happening to some degree. But two, it’s about a choice. It’s about what do we want in these systems?

And we’re certainly not saying or advocating that all laws should be digitized in this way. There are always going to be things that are complex, where there’s going to be a need for continued iteration and sensing through courts and other legal processes about what extent, what is an appropriate limit or so on? But there are lots of cases where it is are you 18, and therefore eligible for this? Do you earn x-amount and therefore are eligible for this? There are already a lot of prescriptive things. And if we can help move these into Rules as Code that might free up a lot more energy and space to concentrate on those more difficult issues.

The other important thing I think I’ll mention is that, in terms of whether it makes laws more opaque, laws are already fairly opaque for a lot of people. In some ways, this is an opportunity to make them more transparent. Because even if you, as an individual citizen, might not understand the full complexity of the law in a digitized system, by making it digitally available like that, you can make it easier to interrogate those laws about what is allowable or not allowable, and where that relates to in the legislation itself. It also makes it more accessible to third parties, who can then perhaps make it easier and more digestible for the average citizen.

**OLIVIA NEAL:** So, it’s broadening up that access to not just people having to rely upon a lawyer to interpret something, but having different methods of engaging, so making that engagement, broader and potentially more transparent to a wider group of people as well.

**ALEX ROBERTS:** Yes, I think so, and I hope so.

[MUSIC]

**OLIVIA NEAL:** Alex, this has been really fascinating. Thank you so much. One of things that we’re interested in, in this show, is really finding those examples of areas of innovation and new thinking and new delivery around the world. And I wondered, from your perspective, because you have this fascinating engagement with many – many countries all around the globe, are there any examples, maybe outside of the areas of Rule of Code, where you’ve been really impressed by the work of public servants on a particular project, which you think other people should be aware of, and go and check out?

**ALEX ROBERTS:** It’s hard to pick one, because there’s so much good stuff going on. I think, you know, as part trends work that we’ve done every year with the UAE to identify emerging trends in public sector innovation, the things that are really stuck out to me have been things like Rules as Code that offer, not just the potential to transform specific projects, but the whole way of doing government. I think another example for me, and emerging one, still early, but IP Australia, the Intellectual Property Office in Australia, where they have what’s called IP GAIN, which is a collaborative attempt – a platform for different intellectual property offices around the world to collaborate on artificial intelligence and shared services effectively, where different agencies can focus on what they do well, and then draw upon the software, the architecture of others for the things that they’ve done well. That model, I think, is really interesting about – and changes the model of government, of thinking that we don’t have to do all of this ourselves, there’s a great potential for collaboration between countries to speed up learning, to speed up expertise, to speed up specialization.

**OLIVIA NEAL:** Okay, those sound like some great examples there for people to go and check out. And, well, thank you, Alex, so much, for your time today. I think this has been a really insightful conversation. If people want to learn more about your research and your report, and the Rules as Code topic, or more broadly, about the work of the Observatory for Public Sector Innovation, where can they go to find out more?

**ALEX ROBERTS:** Yes. If they go to our site at OECD-OPSI.org, they’ll find everything they could want.

**OLIVIA NEAL:** That’s fantastic. Well, thank you so much for your time, and good luck with the rest of your projects. Thank you, Alex.

**ALEX ROBERTS:** Thank you so much.

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**Olivia Neal:** Thank you to our guest, Alex Roberts and thank you to our listeners for joining me today on *Public Sector Future*. Our goal is for you to learn something new and be inspired to think differently about your journeys. If you enjoyed today’s episode and want to help others find it, please share, rate and review the show -- it *really does*help people find and discover new shows like this one. Listen and Subscribe wherever you get your podcasts.

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