



## Cool Tools Show Podcast Episode 100: Jennifer Pahlka

Transcript

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*Our guest this week is Jennifer Pahlka. Jennifer is the Founder of Code for America, a nonprofit dedicated to proving that government can work for all people in the digital age. She served as the U.S. Deputy Chief Technology Officer under President Obama, and founded the United States Digital Service dedicated to the same idea.*

Mark: Welcome to the Cool Tools Show. I'm Mark Frauenfelder, Editor-in-Chief of Cool Tools, a website of tool recommendations written by our readers. You can find us at cool-tools.org. I'm joined by my co-host, Kevin Kelly, Founder of Cool Tools. Hey, Kevin.

Kevin: Hey, it's great to be here.

Mark: In each episode of the Cool Tools Show, Kevin and I talk to a guest about some of his or her favorite uncommon and uncommonly good tools they think others should know about.

Our guest this week is Jennifer Pahlka. Jennifer is the Founder of Code for America, a nonprofit dedicated to proving that government can work for all people in the digital age. She served as the U.S. Deputy Chief Technology Officer under President Obama, and founded the United States Digital Service dedicated to the same idea. Hey Jen, how's it going?

Jen: Great! Thanks for having me.

Mark: Yeah, absolutely. It's been quite a while since we've had a chance to chat, and this is a great excuse to do it. You have some really interesting tools, and I like the fact that you pick tools that aren't necessarily ... fit the common definition of what a tool is, but what Cool Tools considers a tool. Something that is useful in your life and makes a change and something that you use every day or frequently and recommend to other people. First of all, you are a coder, obviously, so you have some kind of

code-based tools. One of them is called Phaxio. Tell us what Phaxio is and what it does.

Jen: I will have to admit upfront, I'm not actually a coder, but I do work with our coding teams here at Code for America, and what I like about Phaxio is that it's sort of a hack, not just on sort of services, but on government.

What we do here is we try to make services that work much better than the government services as it's offered. For instance, if you want to apply for food stamps in California and you want to do it online, you'll go through an application form that's over 50 screens long. It doesn't work on a mobile phone. It's got some issues, despite some very good people trying to help other people in this country.

One of the things we started doing was just making a better online form and then having that form create a fax and then faxing it into the office. It turns out the place where faxes are still really, really useful is in government services, in government offices. I never would've said, 10 years ago, that fax was key, but it really is for the work that we do and it really helps us hack bureaucracies.

Kevin: In fact, are they receiving them as things that are printed out on paper?

Jen: Yep.

Kevin: They're not just getting electronic versions of these faxes. They're actually printing them out on a paper. Why are they still doing that?

Jen: I don't mean to imply that all government offices still take faxes or that all government offices only take faxes, which is certainly not true, but they do have fax machines and they do use them. They take them because there are still a lot of paper and a lot of faxing and a lot of shipping of paper and paper files around from offices to offices in government, which is part of why things take so long.

Mark: I don't want to derail this too much, but they do that because they've always done that and that's how it's done? Or do they find that there's a certain efficiency in keeping everything on paper that maybe we don't recognize?

Jen: It's a good questions. Paper is certainly very reliable in a certain way, but if you think about sort of an ecosystem of community-based organizations that may be having people come into their office for help, take for instance, a food bank. If you go to a food bank, it's very likely that someone who is there to help you pick up some food to help you feed your family that week will ask if you are on a food stamps program. In California, we call ours CalFresh. If you say no, they'll hand you a paper form and have you fill it out there, and that's their business process at the food bank. Then, they'll take that and send them in bulk or fax them in, or whatever because that's the way they've gotten them.

Now actually a little bit plug for Code for America, now actually, a lot of these food banks have tablets or mobile phones handy and they'll say, "Here, use this Code for America form called Get CalFresh, which takes about seven minutes and it can take a picture of your driver's license and upload it and include it." Things are changing, but that has been the business process across an ecosystem, and since everybody's still using it, everyone still needs to accept that on the other end.

Kevin: Okay. This is a set of tools that would allow if you needed to deal with the government at least the U.S. government, you could use this Phaxio as a API to interact with them. You don't have to start with the fax, you can start with digital text but it goes into the fax format.

Jen: Yeah, exactly. If you were to fill out the application for food stamps on Get CalFresh, which is our mobile-friendly, seven minute form, now it actually goes directly into the system and that'll get to my next tool. Originally, when we were just starting before you can do real integration which takes a little while, your kind of minimum viable product is it creates a form that looks like the form they're used to receiving in these offices that just gets faxed in. That's just sort of how you start things. It's not where you want to end up, but it's an easy way to start because it's the thing you know that they'll definitely get.

Kevin: Cool.

Mark: That's great! The next tool that you're going to talk about, the Selenium WebDriver is similar but it kind of closes the loop and it doesn't require fax, right? Tell us about it.

Jen: Yeah, I'd say it's like the next steps in making these services ... or making services that can sit on top of government services a lot easier to use. You still had people to fill out that much nicer form that works on a mobile phone, it only takes a few minutes and it can help them upload their documents. Now, instead of creating a fax that goes to the office, we just drive that data using Selenium right into the system of record.

I say it doesn't entirely close the loop because at the end of the day, what you want to do is actually redo those systems of record to be much simpler and have clearer, easier front ends and ask fewer questions and have fewer data problems. For now, that is a very effective way that you can hack online applications to government services and really anybody can do this.

Kevin: You say it's a web driver. I'm not even sure what a web driver is. What is a web driver?

Jen: I pride myself on ignorant descriptions of things. The way I describe it to folks who aren't developers and I know you're both more technical than I am but it's like you take little robots take the data that we collected from the people and then put them in the online form that actually exists.

Mark: That's cool. I could see that when my daughter was going to University of Colorado, they had the world's worst websites that were like kind of separated from each other, even though you needed to access like two or three of them just to get one thing done with like paying bills or giving food cards and everything like that. I kept on wondering, I said, "If somebody could create a service for CU students, where it's like one easy to use webpage where you would enter data one time and it would populate all the forms automatically for you."

Jen: Exactly!

Mark: This sounds like it could that for you.

Jen: Selenium would be the perfect solution for that. In fact, a lot of people not just at Code for America, but are in the sort of civic hacking, civic technology space use it for exactly that. It makes it easier on the user and the government partner doesn't necessarily even know that you've done anything, they just start getting applications.

Mark: I love doing that. It's kind of an end run around bureaucracy that isn't going to budge or change, and so you're just like all right, we don't you to budge or change because we found a way to just make it easy for people to use so who cares? Keep on being your sluggish giant self.

Jen: We do find them changing, though, and that's part of the work we do, is help them then take the next step, so ...

Mark: Well, good. I'm glad somebody's doing it. That's like too hard for me, I would rather just do the end run.

Kevin: People were trying to do that with Craigslist, which by the way, it has never changed in 20 years.

Mark: Yeah.

Kevin: But they didn't let them ...

Jen: Yes.

Kevin: ... over time. Presumably, the government is not blocking people from hacking their stuff upstream and then sending them what they need. I presume, right? They don't really care, as long as they get the data.

Jen: Yeah. It's very hard to generalize. Different government offices will handle tech hack differently. Our basic approach has been to be very respectful and always be clear about what we're doing and tell folks, and be respectful of the fact that sometimes these kinds of things can actually have negative impacts on the offices. We never

want to create some enormous flood of applications, for instance. We've been very careful not to do that, or create a bunch of applications that are actually not eligible, for instance. They have different responses, depending on if you've approached them in a respectful way.

Kevin: Right, that make sense. Let's talk about this Lyft hack, since we're talking about hacks. Lyft, everybody knows it's like Uber but you have a really cool way of using it that maybe not was intended to use but it seems to work.

Jen: Yeah. I'm a big fan of Lyft and one day I realized that when my daughter was calling from her school, which is walking distance from my office and she would come over in the afternoon. One day it was raining and she wanted me to come get her and I said, "Well, I'm not going to come get you, but I'm going to send you a Lyft." I just used my finger to move the map to where her school was, dropped the pin there and called the car. Then I could just ... for a minute I thought, "Oh my gosh, is this dangerous?" But I realized I could actually watch the car arrive and pick her up, watch the driver drive her here and knew exactly when she would arrive.

Mark: You could text and call her in the car, too.

Jen: Yeah, so just let her know what car was coming. The great thing is I can also do that when I'm in New York and my kid is stranded and needs to go home and when I'm in another country, I can get her a car whenever she needs one.

Kevin: I'm so surprised that worked, because I had assumed that the way this worked technically was that the Lyft or Uber was doing a match of the movement of your phone and the driver's phone together to ensure that they really did ... or to prove that they really pick you up and that your phone would be present there, but I guess it doesn't work that way.

Jen: I thought the same thing, which is why I wasn't sure it would work when I tried it, but they don't do that. I'll also add I've had the situation where you're in the Lyft with someone else and you called it but you get out earlier and you wonder if because you've gotten out of the cab with your phone, or the car, that something will and it doesn't.

Kevin: That's a cool hack.

Mark: Yeah, very cool. That's a great one to know, and especially if you are in a situation where you can't pick up the kids yourself, which has happened to me many times, so ...

Jen: Yes.

Mark: Thanks for that, that's a good one.

Jen: I should add that like many great hacks, it does violate Lyft's terms of service.

Kevin: Yeah. The funny thing is I think that they should make a version of this. Just like Netflix allows you to have multiple users, they should have an account that you can actually extend to your kids, put it on their phone. Maybe add some extra levels of security to ensure that everything is fine. That just seems like an obvious consumer benefit or a consumer choice that they should offer officially.

Jen: Yeah, I agree, I think a lot of parents would say they'd pay extra for that.

Mark: For sure. Your next tool is completely different from everything and it's actually more of a definition of a tool someone would consider it to be a tool. It's a copper Tamago pan that belongs to your daughter. Tell us, first of all, what a Tamago pan is and then what you like about it.

Jen: Yeah. This is just my favorite thing in my kitchen just because it's kind of unique. Tamago is what you get at a sushi restaurant that's basically egg. It comes ... sort of nigiri style, there's like a little slice of scrambled egg, essentially, but it's done in a very Japanese way. To make Tamago, you have to have a small rectangular pan. This one happens to be copper. It just looks beautiful, it has a wooden handle and then this beautiful copper body. Basically what you do is you make this mixture of egg and dashi and a little salt and a little sugar, and then you have to sort of pour it in bit by bit and then roll it up, sort of sticking it at the end. What it makes is this very rectangular piece of egg that you can then slice and it looks very pretty when you lay it on the rice.

Mark: It's cool, I actually took a Tamago making class with my wife in Tokyo in April.

Jen: You did?

Mark: Yeah.

Jen: You'll have to teach me your tricks 'cause I'm still not particularly good at it.

Mark: Do you use chopsticks to kind of roll it up as you go along?

Jen: No, I've been using a small metal spatula.

Mark: Okay. For some reason, we used chopsticks and everything worked perfectly. We had somebody right there, we were like in a little professional kitchen in Ginza and that was a really fun day, a rainy day outside and we were inside making Tamago. I loved it.

Jen: You promise me you'll teach me your tips-

Mark: Yeah.

Jen: ... because I still feel like I struggle. My daughter is much better at it than I am. It is, I guess ... you probably noticed, it's slightly tedious, right? It's like a lot of detail.

Mark: Right. It takes a lot of time to do it properly.

Kevin: It's the Japanese way.

Mark: Yeah-

Jen: It is really lovely, because then I mean, I guess another cool tool that a lot of people have is just a rice cooker, but you can have this Tamago made in advance and then in the morning just have your rice cooker ready and you turn it on. Then, right as you're ready to leave in the morning, you can put some warm rice in a little box, lay your Tamago, a little bit of seaweed on the side. It's just very healthy, perfect, easy lunch.

Kevin: A Tamago is like an omelet in many ways, a Japanese omelet, you would say?

Mark: Yeah, that's exactly what it is without cheese, but and or really any fillings.

Kevin: Right.

Mark: Is this one that you linked to here on eBay? Is that the exact one you have?

Jen: No, I don't, no. It's similar.

Mark: Okay.

Jen: It's very similar.

Mark: It's similar. Okay, that's fine. Also, I'm just curious Jen, about rice. I've been reading a lot lately about the high arsenic levels in rice and our whole family eats lots of rice. Are you concerned about that? If so, what do you do about it, if anything?

Jen: Oh my goodness. I was not aware of high arsenic levels in rice. We don't eat a ton of it. My daughter eats the most of it because she is a fan of all things Japanese, in particular Japanese food. Now, I'll have to go ... Tell me, so ...

Kevin: [crosstalk 00:17:19]

Jen: Now you've ruined my day. Thanks a lot.

Mark: I'm sorry. There's work around ... There's lot of ... and consumer reports which I think to be super trustworthy and not like flakey or anything said it is a concern, don't eat too much of it, but there is a work around, where you ... it takes some preparation. The night before you soak your rice in a lot of water and then pour off the water, rinse it one more time and then cook it in the rice cooker with like twice

as much water as you would normally use and then pour that water off, rinse it once again with hot water and you will get rid of 80% of the arsenic, which makes it so that you're okay again, basically.

Kevin: The idea is this is not like from pesticides, this is sort of a natural ingredient in the rice-

Mark: Yeah. It's just arsenic that's ... rice, the rice plant is good at leeching or sucking up the arsenic out of the ground.

Jen: Oh, my goodness. We already do that and that we soak the rice overnight 'cause I just leave it set up to go in the morning. I guess I just need to rinse it.

Mark: Yeah, just rinse it one more time-

Jen: One more time?

Mark: ... pour it off and you're probably going to get rid of a lot of it.

Kevin: Right.

Jen: Well, thank you, I've learned so much.

Kevin: now you can rest easy, now you can relax.

Mark: Yeah and enjoy your rice and Tamago again.

Jen: Yeah, well good, now I feel much safer, as long as my kid doesn't get abducted by a Lyft driver, we're all good.

Mark: Exactly. We have a couple of minutes left. You did a Long Now talk recently, that's an organization that Kevin's associated with about the notion of iterative regulation and policy making. Tell us a little bit about that.

Jen: Yeah, this was a fun talk to do. I have been tracking a lot of changes, as you can imagine, in how government adopts technology, especially more modern technology and especially what we call user-centered iterative and data-driven practices that can be used really outside of technology, but help government get the benefits that we think of technology bringing to the consumer sector. It's really just a different approach and sometimes different cool tools more than it is technologies ... actually, kind of a lot of technology in government not all of it very helpful technology. Government spends hundreds of millions of dollars on things that you or I or someone in a tech company might spend much, much less on.

I've been realizing through my work with policymakers and when I was in the White House, I had the wonderful chance to work with Cecilia Muñoz who was the Domestic Policy Council Head there. She said to me, "Hey, this isn't just about tech,



this is how we should be governing." We started looking for ways that we could apply this user-centered and iterative and data-driven approach to policymaking, writing of regulation and other kinds of rules, and have really gotten to see that, in fact, when you help them do it in an iterative way, the same way that you might make a minimum viable product of a website and then iterate on that until it got better and better. You can do that with things like regulation.

We worked with teams that have done it. I think the first one we talked about was writing regulations for a part of the ACA called MACRA that is designed to pay doctors more for better quality work. When we had them, the policymakers and the rule writers see an MVP of their work in action through a website and then iterate on the regs and then iterate on the website and then iterate on the regs and do that several times back and forth, these policymakers were just so excited. They said, "We've never shift regulations, we were so confident in and felt so good about because we could actually see them in action and change the things that weren't working."

I talked at Long Now just about if we can continue to do that, let's play that out 10 years, 20 years, 30 years, then we're having much more responsive government, which I think could be just really exciting and hopefully draw a lot of people who would not otherwise be interested in government to this topic.

Kevin: It's sort of like agile legislation, right?

Jen: Mm-hmm (affirmative).

Kevin: I mean, very similar to the pattern that you would do with any kind of a software product and basically law is software, right?

Jen: Law is software, software is law. Those connections are becoming clearer and clearer to people, as we bring more technology people into government.

Kevin: Cool, that's really great. I'm so glad you're doing it. It's so needed. It's not just about the U.S. either, of course. It's all around the world, the same problems.

Jen: Oh, and other places in the world are doing this and, in fact, maybe more than we are. I heard recently about Norway doing a very iterative user-centered process for trying to figure out how they will write the policy for their experiment in universal basic income, for instance.

Kevin: Cool-

Mark: That sounds great, I would love to ... Is there a place where we can see your Long Now talk? Because I'd like to link it.

Kevin: Yeah, I believe there is that's available online. More importantly, Jen, is there somewhere people can go to hear what you're doing specifically? Is there a website or a Twitter?

Jen: Certainly Codeforamerica.org has some basic information, but mostly I write about this on Medium at the Code for America channel on Medium.

Mark: Okay.

Kevin: Fantastic.

Mark: We'll link to that, too. That sounds great. Jennifer, thank you so much. This was really fun talking to you about all these things. Good, surprising tools, our favorite kind.

Jen: I am so delighted that you invited me and that my tools were cool with you.

Mark: Incredibly cool.