Brian Boyer, news applications editor, NPR

Megan Cloherty, producer, It's All Journalism

Welcome to It's All Journalism, I'm Megan Cloherty, joined by co-producers Michael O'Connell and Anna Miars. And today we have Brian Boyer with us.

He is a hacker journalist, at least that's what he calls himself on his website.

Brian is the news applications editor at NPR and the project manager for the Panda Project, a newsroom data library application that helps newsrooms store and search their data sets. Before coming to NPR, Brian worked at the Chicago Tribune, leading a team of data journalists, designers and developers. Welcome, thanks for coming.

Brian Boyer, news applications editor, NPR

Happy to be here.

Megan Cloherty

OK, what is it? Is it hacker? Is it journalist? Is it both?

Brian Boyer, news applications editor, NPR

Golly. There are a lot of names for what we do. Some people call it computer assisted reporting. Some people call it data journalism. When I got into this game the name that was being thrown around was programmer journalist which just seemed kinda long.

Michael O'Connell, producer, It's All Journalism

Serious.

Brian Boyer

Yeah. I actually was originally inspired by Neal Stephenson wrote this really amazing piece that was subtitled like 'Adventures of the Hacker Tourist.' And I was just drawn to it. The word hack, hacking, is not a negative term in the programming world. It's a term of endearment. So calling yourself a hacker journalist is kind of calling yourself like a cool guy, or something, which is a little

Megan Cloherty

Badass journalist

Brian Boyer

That makes me a little uncomfortable.

Michael O'Connell

So Mr. Joe Cool.

Brian Boyer

But you know, we program in the interest of journalism. Just like a photojournalist takes photographs.

Megan Cloherty

It's All Journalism

Tell us a little about your background. What got your interested in this type of journalism?

Brian Boyer

You know, I studied computer science in school. I worked in the kind of start up scene in Chicago. A lot of different consulting companies and development shops, building software for lawyers and marketing teams at banks and other soul-sucking crap.

And I happened upon one day a blog post on <u>boingboing</u> that said Northwestern University was giving scholarships to study journalism at Medill at Northwestern University. And it just kind of struck a nerve.

I was thinking about going back to school and studying law or getting a degree in public policy, because I wanted to do something more socially conscious with my skills. And uh, journalism was never really on my radar. So I found this post and I Googled journalism and read the journalist's creed that Mizzou has. And it just seemed it was like what I was thinking about — law and policy were sort of making the world a better place from the top down and journalism was the opposite, it was from the bottom up, which was way more fun. And so it was a very quick left turn in my life and it has been an interesting ride in the last five years.

Michael O'Connell

So did you see sort of immediately the skill set that you had as being able to bring something different to the journalism discussion?

Brian Boyer

Well that's what they were pitching. That was the purpose of this grant program that funded my school was that folks were saying, 'Journalism needs more software developers in the newsroom.' And uh, it wasn't really obvious to me what I was going to do for a living once I got out of school, but it just seemed like the right thing to do.

Megan Cloherty

And so you stayed in Chicago?

Brian Boyer

Yeah. It was an easy choice. I was already living in Chicago. I attended Medill which was in Evanston, just north of Chicago and then I had an internship at ProPublica. So I packed up my bags and moved to New York City for three months. About halfway through that time period, I got a phone call from the Chicago Tribune, they wanted me to come in for an interview. And they brought me right back to Chicago.

Michael O'Connell

What type of stuff were you doing for the Trib?

Brian Boyer

We were the news applications team. We were the first news applications team. So I was brought in to start the team, hire people. And the work we did was mostly hard

news. Our mandate was to work with the politics team, with investigative mostly, we did some work with business. We didn't really do any featurey stuff. Our mandate was fuzzy besides who we were going to work with. No one really said hey you have to make this kind of website or that kind of thing.

Michael O'Connell

So news application team, explain what that means.

Brian Boyer

Sure. We call ourselves news apps, which is unfortunate because right around when we named, decided to call the team that, the word app kinda got away from us. But what it is, is we sort of do special projects on the Web. We make maps. We make data driven websites. We put data on the Web.

I think when a news app really works is when it can tell the audience their personal story. So for instance, you might read a story in the newspaper or hear it on the radio about schools. They'll cite three anecdotes, talk to a couple parents and uh, and the person reading it says, 'Oh crap, what about my kid's school? What about my neighborhood?' And you know, in newspaper you only have so many inches and on the radio you only have so many seconds, but on the Web we can talk directly to anyone's individual personal story.

Megan Cloherty

You have to think about mobile and all that stuff too, right? It's not just Web.

Brian Boyer

Absolutely. At NPR especially. We started doing this at Trib. But at NPR especially, our rule is if it doesn't work on mobile, it doesn't work. We've made, every single thing we've done at NPR has been mobile friendly. We don't really build native apps, like an iPhone app. We build websites that are optimized for mobile browsing. And I mean, that strategy was sort of kinda gut based and kind of numbers based. But it has really panned out.

In the last few weeks, a couple studies have come out. Pew just released a <u>report</u> that spoke about the majority of Americans now own smartphones. The census just released a <u>report</u> about saying that, although white people and Asian people are still more likely to have Internet access wired at home, more than 50 percent of the population regardless of race is using smartphones to access the Internet. So smartphones are reaching the proverbial digital divide right now. If it doesn't work on mobile, you're missing an audience — an important and underserved audience.

Michael O'Connell

Do you consider yourself a storyteller?

Brian Boyer

Yes. Ya know, it's different. We don't write written pieces. When we think about a piece. We ask ourselves a handful of questions. We ask, 'Who's our audience?' And then we ask, 'What are their needs?' And then we think about what to build. We try to avoid the

problem the engineers have, and the problem designers have, and the problem the writers have. Everyone wants to the big engineering project, the most beautiful design, or the most compelling story. We tell stories, but we're always trying to address the needs of our users first before we decide what story to tell.

Michael O'Connell

Can you give us an example either at the Tribune or NPR where you've been able to do that?

Brian Boyer

Yeah, absolutely ...

Michael O'Connell

I've been working for the last 10 years...

Brian Boyer

It was a late night. So for instance, one of my favorite projects we've done at NPR is a little thing called the <u>Fire Forecast</u>. The story last year and now this year was that wild fires, mega fires are this increasingly bad problem. Because unfortunately of the Smokey the Bear effort where we were putting out all fires. There's an accumulation of dry and burnable materials on the ground. And so fires are not only getting more frequent, they're getting worse.

So the science desk came to us with this story and we said, 'Hey, that sounds interesting.' The original pitch was let's make a map of all the historical wildfires. Maybe you could hit play and see them pop up or something like that. That seemed interesting. Some news organizations did exactly that piece. But we said to ourselves, 'If I lived in Colorado and I just heard a piece on the radio that says America's a tinderbox and we're all going to burn, I don't want to know where the fires have been, I want to know where they will be.' Right?

And so fire forecast is a pretty small application that uses data that we got from the Forest Service. The Forest Service distributes for use by firefighting teams to give them sort of an idea if they're going to have a bad day or not. And so we got this data, we built a map out of it. So you can pull this thing out of your pocket in the morning and just like you can see the weather report, you can see the fire report is for that day.

Michael O'Connell

I can imagine places like Colorado or California where that would be hugely interesting and helpful to people.

Brian Boyer

It's a very simple little application. We were talking about users. There were two use cases we wanted to address: Am I going to be safe today? And there's this little button that says, find my location. And your second, Is grandma going to be safe today? And there's a little box where you can type an address in. And that's all it does.

Megan Cloherty

So if you're starting a project, hoping that whoever comes to you is aware of what your limitations are and they're not asking for the moon, how much time do you spend with the actual data and how much time do you spend figuring out what's going to work as far as presentation goes?

Brian Boyer

It really widely varies. If you're working with government data, you know, who knows how good it's going to be. This fire forecast data was lovely. It was perfect. But frequently, you'll get a government data set that's just filthy. And you have to spend days or weeks cleaning it up or creating the data, which I think is one of the more noble things we as data journalists can do is to not just recycle data, but to actually gather it and create novel data sets.

But really the, ya know, for folks like us. I've been a programmer for my entire career. Even for people who haven't been programming that long, programming is not the hard part. The hard part is design. And not just design like graphic design, but design in a holistic sense. It's figuring out what the right thing to make is.

Megan Cloherty

Because you really have to come out of it, right? I mean you spend so much time with this data, it would seem like it would be difficult to step back and say, 'What do people really want to know from this?'

Brian Boyer

That's why we all need editors. These days I don't write a lot of code. I code sometimes. When I'm actually in it, when I'm actually in with the team getting my hands dirty, I step back and I find an editor for me. Because just like any other piece, if you're in the thick of it, you're blind to its problems.

Michael O'Connell

When you're talking about coding, what is it your doing? Let me be stupid. What programs are you using? What do you feel that you use most day-in and day-out.

Brian Boyer

Our team uses the Python programming language, which is a wonderful and simple programming language that's heavily used in the academic community. We might use Python to let's say, process some data. So I've got a government data set, I want to clean it up. Think of a data set like a spreadsheet. And I want to, let's say there's a column missing in my spreadsheet that I need to compute. Just like you would do in Excel, we usually do in Python. So we roll through the data, change it, manipulate it. And the majority of the front end work, the interface work is just HTML, CSS, the sort of backbone and outfit that Web pages have and then Java Script.

Michael O'Connell

Just sort of creating a framework for the data set to show itself.

Yeah.

Megan Cloherty

So we all went to American University and I think in the middle of the program we had David Wright come in.

Brian Boyer

Yes, Dave.

Megan Cloherty

Who at the time was at NPR, now he's at Twitter. And he was talking about just sort of how NPR was on the forefront of designing for mobile, designing for tablet, especially when it came to the iPad. Is that part of the reason you went to NPR? Tell us about what it's like to work somewhere where that really is a priority?

Brian Boyer

It has been wonderful working at NPR. That's not to talk bad about the Tribune. Tribune was an amazing place and it was a very difficult choice to leave. What's been great about NPR is that I haven't had to explain too much to folks why the things we want to do are good ideas. I meet so many people at NPR that are smart and thoughtful and good at their jobs. It is a delightful place to work. And yeah, they've been out in front especially on mobile. NPR.org is not the New York Times or CNN when it comes to traffic. But when it comes to mobile traffic, we are.

Megan Cloherty

Because it's all about the navigation right? That's how it starts?

Brian Boyer

It's about usability. To me, mobile is about meeting people where they're at. It's about meeting people, we did a project at Tribune where we researched building a new mobile version of our website. And we realized that we didn't need to cram our website in a smaller box, we realized the goal was to reach people in bed, to reach people on the bus, when they're on the toilet. We reach people at the cracks in their day, their moments in between things. Because that's how we consume media. Very rarely, do I sit down and decide to spend an hour reading the newspaper. Folks consume media in between doing other things and mobile is a really good fit for that. Mobile works very well for that in this case.

Michael O'Connell

I don't do data sets, I don't do programming, but I have done some design in the past. And one of the things I noticed about mobile is, by having that sort of straightjacket, because it is a straightjacket, because you have to put all this functionality in the palm of their hand, it sort of guides you down pathways of decisions that you have to make to feed that simple functionality. That's a challenge but it's also, one of the things we do as journalists we try to tell stories and reach people and get things that they can use. And

being able to create an app that somebody wants to know whether there's a fire where they live, that's kind of really important and helpful.

Brian Boyer

Yeah. Working with a blank slate is very difficult. I find it's essential to embrace constraints. You need to set up parameters around yourself and then work within those parameters. Mobile design is sort of a great mind hack, right? If you've only got three inches tall, two inches wide to work with, it forces you to prioritize. And all we really do is prioritize all day long, right? And if you look at most news organization websites, they are incredibly unprioritized. They are just this Cosby sweater of bright colors and every damn thing is important.

Anna Miars, producer, It's All Journalism

It's just a dump.

Michael O'Connell

Right. Shouting at you.

Brian Boyer

And that's because it's very difficult to set priorities. So when you've got to fit the thing into 2 inches wide, you are forced to set priorities because you can't make everything important. I find that to be a very useful constraint. And frequently, what we do, we actually do mobile-first design, where anything we build, we design the very small version first and we stretch it out to fit the desktop. So we've set our priorities first and then we make the desktop version once we figure that out.

Michael O'Connell

You know people who are designing websites who are thinking about how to design their page, they should look at the Google page. Because it's all function, it's all simplicity. And design from that perspective. What are you there for, what are you providing to people? And don't junk it up.

Brian Boyer

Absolutely.

Megan Cloherty

And white space too is very important because you need that break, right? But again when you don't have any space to work with, I imagine leaving white space is really tricky.

Brian Boyer

Yep.

Michael O'Connell

It used to be from a design standpoint, you'd have a map, oh I don't know of the Fourth of July or at the National Mall or the presidential inauguration and you want to have all this detail and all this stuff. And everything you build an image it has all these small

details and that's not going to fit on an iPhone. So you're going to need to come up with a different way to present that material, you know, maybe put a Google map in, maybe put in other little features that sort of open up new things.

Brian Boyer

Yeah. And that's exactly how our elections coverage from last year panned out. Not only is a map of the country very bad on mobile. Like, can you find Delaware? It's very, very tiny. Also, election maps lie. Both the placement of states matters sort of, the physical size and shape of a state doesn't matter at all. The story you're trying to tell on election night is electoral votes. So we sort of started with this premise that it had to work on mobile and that election maps lie. And we ended up sketching something that was basically a bar chart. Red bar, blue bar. Fill that in with electoral votes once the night goes on. Once we sketched it out with little cubes, little squares filling those bars, we realized we were building Tetris. And that's actually what we did for election night, we built sort of an Tetris game. And you could watch the election night results roll in as little boxes.

Megan Cloherty

So, Delaware was one of those squiggly lines that comes down.

Brian Boyer

A couple little boxes.

Michael O'Connell

You're just waiting for Florida to drop.

Brian Boyer

Waiting for Florida to drop ...

Anna Miars

How long do these projects take? I'm sure they vary. From something that's breaking kind of urgent to the election that you'll have time to think about?

Brian Boyer

Sure. It does widely vary. We generally try not to do a project that'll take any longer than a month or two. Our elections work was a series of projects we executed over a few months. I feel like we need to be able to move on breaking news, although we don't do it that frequently. I like working on a small team on small projects. Then again, it's another constraint. When do you don't have a ton of time and you don't have a ton of people, you figure out the right sized thing you do. You figure out the right amount of technology you want to throw at a problem. As an editor, I find I've spent a lot of time over the last few years talking down engineers from big engineering ideas. And I can say that because I am an engineer. But yeah it can be a challenge.

Michael O'Connell

Somebody who wants to go into this, to this type of journalism, what path would you suggest for them?

You know, I'm an exception to the rule in that I was a software developer first. The people, the teams like ours that do the work that I admire most are all led by journalists who are self-taught programmers. The team at the New York Times, whole bunch of journalists who are self-taught programmers. Now they have programmers too. But um, the team at the LA Times and Ben Welsh does some of the most heartfelt, easily some of the best work in the industry and he just taught himself to code. Matt Waite, who was the only programmer who I know to have a Pulitzer Prize, the guy who put together PolitiFact at St. Pete. Matt was a reporter. His PolitiFact was one of his very first Web projects. It's still an example of one of the webbiest pieces of journalism I've ever seen.

Megan Cloherty

Most journalists have to start in like Paducah, Ky. It seems like if you want to be a programmer, you can be in L.A. or Chicago. That's something to consider.

Michael O'Connell

There we go. Just move to the big city and learn how to program.

But say I'm a journalist. This is interesting. This sort of fascinates me and I see possibilities for different ways of covering elections of telling school stories and things like that. Where do I go to get these resources to teach myself?

Brian Boyer

There is a tremendous community that's been around a long time before anyone called themselves a hacker journalist called NICAR, The National Institute of Computer Assisted Reporting. Its' a wing of the IRE [Investigative Reporters & Editors] organization out of Missouri. They have an incredible conference which is wonderful to attend, it's cheap and it's the best damn conference of the year, every year, because it's a bunch of doers. It's a bunch of people who make things as opposed to a bunch of people who talk about things. They have, the NICAR-L mailing list. Google NICAR-L — is the place where all the people who do this for a living, it's where they all talk. Tremendous resources, people ask simple questions, people ask very complicated questions. That's easily the place I'd start is with that community, the training IRE provides and the NICAR conference.

Besides that, you can go find a Python tutorial online and just start learning. There are tremendous resources online for learning Javascript, for learning HTML, for learning aspects of data analysis, geographic systems classes. The hard part with being self taught is that it's not enough to take a tutorial. You need to have a project. You need to have to have a task you want to accomplish. That's the only way you're going to break through all the barriers you need to break through to actually grok programming.

Megan Cloherty

So with everyone being self taught, do you find that people approach projects different then? As opposed to having a set way you're supposed to approach it.

Absolutely. I think the team at WNYC in New York is an amazing example, <u>John Keefe</u> was a radio producer, now programmer journalist. His work is wonderful and their team's work is often not technically crazy. Technically pretty simple usually.

Michael O'Connell

Right.

Brian Boyer

But he's just got the best darn news judgment of anybody in the field.

Michael O'Connell

He's got a really good instinct about seeing a problem and coming up with a simple solution for it. Like the Hurricane Sandy thing. Let's take this data and put it on a map.

Brian Boyer

The way John talks about it is, what's the next question someone's going to have? And answer that next question.

Michael O'Connell

Now you're also involved with the Panda Project. Could you tell us a little bit about that?

Brian Boyer

Sure. So Panda is a newsroom data appliance. The P in Panda stands for panda, which is kind of a programmer joke. It is a, it's sort of a data library for newsrooms. So it's not something you would use to publish data. It's something your newsroom would use when you're accumulating data sets. Like in Chicago, we had the list of all the cab drivers. We had the list of all the city employees and the list of all the residents of the Cook County Pen. Right? And those things sit on someone's hard drive or maybe on an advanced organization they put them on a wiki, or internal knowledge management website. But those things just aren't good for data and they're not good for searching. So for instance, a use case would be, the breaking news desk. They have a name. They try to scrub it. They go to Panda, they type in the name, they hit search and it immediately searches across 100 data sets for that name and shows you who the right people, who the people are you might want to call.

Michael O'Connell

Now is that searching your own data sets, stuff you've pulled down, things that you are particularly are interested in following up on?

Brian Boyer

Yeah. Panda is empty when you set one up. And it's your duty to fill it with great data, to feed it.

Michael O'Connell

And use that to help you with your reporting. It's not so much creating apps or things but finding data that's going to support the work that you're doing.

Exactly. It's your data library.

Michael O'Connell

OK. And people can go there — somebody who is running a newsroom and an editor, a reporter — who just wants to organize their data, they can just go to the website? Is it, what?

Brian Boyer

Go to Pandaproject.net. There are instructions there for how to set up your own Panda. It's something that anyone can do with a little bit of determination, 5 minutes and a credit card. It's not free unfortunately but we don't make any money on it. It just costs money to run the server.

Michael O'Connell

Where do you see data journalism going right now? What do you think is the next big thing?

Brian Boyer

Like I said before, I think one of those most noble things we can do is build our own data, and that is something that reporters have done for a long time by just making phone calls or by using social science techniques, surveys, etc. There's a project we're working on right now where we're crowd-sourcing. We're starting with a seed of data and we're crowd-sourcing the rest. That's fascinating to me. Also in that same vein, a lot of people are talking about using sensors for journalism, which is using little devices that can detect air quality or water quality or temperature. Geiger counters are suddenly very cheap. There's a revolution going on in the sort of hacker and maker communities. Where, you know, it has gotten a lot easier and faster to make software over the last 20 years. And over the last five or 10, it's gotten a lot easier and faster to make your own hardware and distribute it. For instance, the EPA doesn't have that many air quality monitors. You can make an air quality monitor or buy one pretty cheap and take readings all over your town. That is a noble thing to do.

Michael O'Connell

I know that, one of the jobs I had as a local news editor. We relied a lot on the state EPA to monitor streams. And we had a couple of streams that had various issues, pollutants. And at one point, somebody said, you should just go out and start testing it yourself. But you know, being able to do something like that, taking journalism to the extra step and gathering your own data rather than waiting around for an official to come to actually report it.

Brian Boyer

Mm hmm.

Megan Cloherty

I have a question about the editorial process at NPR. I imagine, I mean, you have a lot of projects come this way I'm guessing. You still have a limited amount of space to display them and I'm sure only a certain number of people to do these projects. How do you decide, how do you prioritize what you want to take on? Do you guys have monthly meetings or is it more of a lineup?

Brian Boyer

It's more of a lineup. A lot of people come to us with work. Often the conversation first is trying to figure out if what they're asking for is the right thing or if there's something better, which is frequently the case. And then you know, I have a very short biweekly meeting with my boss where I bring my list of projects and we go over them and he helps me prioritize when priorities aren't obvious to me. But one thing I think is essential is that our team is working in line with the goals of the news organization. So we rarely, if ever, come up with our own projects.

And if we do, you know, if a team member says, 'Hey I have this project I want to do.' The first thing I tell them is, 'Good, go find an editor, go find a subject matter expert, go find a reporter who will work with us on this thing.' Because we know, we're all clever people, but I'm not an environmental reporter, I'm not a business reporter, I'm not a national security reporter. So we're always working with the editors and reporters in the newsroom.

Michael O'Connell

Are they relying on you to go get certain data or are they going to provide you with some?

Brian Boyer

It varies. Some reporters are very savvy and have been gathering things. Some aren't. Matt Stiles is on our team. He's a true data journalist. He started the data journalism practice at Texas Tribune. They've done amazing work there and now he's with us at NPR. Frequently, on a project we'll have a question we want to answer. Matt will go call the right folks — he's our resident telephone expert. He will call the governments, call the agencies, call whomever and gather the data or help us build the data.

Megan Cloherty

So obviously you need to know how to program, you need to like data and like sitting down and taking on a project. But as far as characteristics go, I mean, what do you need to be to be a good data journalist?

Brian Boyer

Oh my.

Megan Cloherty

Because you do have to make calls. You have to report.

Brian Boyer

Be curious. Do be willing to make a phone call. It's something I have to teach myself because I'm a software developer. I am afraid of people. I don't even have a phone at my desk. Yeah, I mean, especially you see this in the open government community. A lot of people who are really interested in working with data and really interested in doing something good and they take government data sets and they turn it into something else. And rarely is the story in the data set they're giving you. The story is in the data sets they're not giving you.

Megan Cloherty

And you have to see that.

Michael O'Connell

Yeah and the other thing is, we've had people come in and say, data is never enough. I mean, you have to provide a context to tell the story. Just, hey this is this neat thing we found. Why is it important to me? Why is this an interesting story or not?

Megan Cloherty

Do you feel good about where journalism is going as far as data journalism goes?

Brian Boyer

As far as data journalism goes and and as far as everything else goes. I think this is a fantastic moment in this industry. Everyone gets pretty gloom and doom. But this is our opportunity to rebuild. This is a chance to create something new and different and invent a medium. We've barely scratched the surface of what is Web-native storytelling. We've been putting newspapers on the Internet for the last 20 years. Maybe not 20 years. But this is just an exciting moment and I'm really geeked to be here.

Michael O'Connell

Oh no, you've got people who are saying, 'Amen' to that, I think here in this room. Just one other thing I was thinking about, you said before, crowd-sourcing. What do you see as, you know, crowd-sourcing is one of those subjects that people sort of throw around a lot. What do you see as the role of that in journalism at this point?

Brian Boyer

It's a buzz word and it's a buzz word that's getting a little tired. Right? I don't expect to ask the crowd to write a piece of investigative journalism. I don't really expect to ask people to even write stories. Period, full stop. What we can do is find audiences, find people that are passionate about a subject and ask them to do things for us. This has worked out really interestingly at NPR. Because unlike a lot of news organizations, people people literally love us. When they like us on Facebook, they really like us on Facebook. We've had remarkable success where we ask, our first one of these was asking people to write a message to the president for his second term and hold up a sign and take a picture of themselves and send it to us. And we weren't sure what we were going to get. We're asking people to send us pictures. But we said, 'Hey, our audience is pretty cool, we're not going to moderate this.'

Michael O'Connell

'Hey man, don't harsh this for us man.'

Brian Boyer

And we didn't moderate it. I mean we moderated it after people posted. So we went and cleaned up after a while. But no one posted a picture of their junk. Everyone was pretty thoughtful. It was a bit of a risk, but it has been wonderful. So I mean just that. I mean people like to create. They like to be a part of something. You can, the team at ProPublica. They have this wonderful concept they call casino mode when they're talking about crowd sourcing data. The idea of the <u>casino mode</u>, you hit the button that says, 'I'd like to help you.' And then all the doors go away. There's no exits. There's no way out. There's just one lever to pull. Right? You look at this thing and you tell us something about that thing. And you hit the next button. And you see a thing and you write something and you hit the next button. So you sort of push away all outside influences, and focus someone into a problem. People will do that for hours. If you just set up the environment for them and not show them a blinking banner ad, and you know, just simplify it. People love to help.

Michael O'Connell

It's a way to engender community on the Web. Again, you said before, I don't think we've seen all the potential of Web journalism and Web storytelling. And I think that's just part of it.

Megan Cloherty

Tell us where our listeners can find our work and you on social media and all that jazz.

Brian Boyer

Sure! You can follow the NPR News Apps team <u>@NPRapps</u> on Twitter. That's kind of our team homepage. We also have a blog, <u>blog.apps.npr.org</u> where we write about mostly technical things: the tools we use, the processes we follow. I am <u>@brianboyer</u> on Twitter.

Michael O'Connell

B-O-Y-E-R. All right well thanks for coming in and talking to us. This has been really interesting.

Brian Boyer

Absolutely. Thank you. This has been fun.