

Olivia Ryan: Can you just state your name?

Marcia Knous: My name is Marcia Knous.

OR: Just give us your general background. How did you come to work at Mozilla and what do you do for Mozilla now?

MK: Basically, I started with Mozilla back in the Netscape days. I started working with Mozilla.org shortly after AOL acquired Netscape which I believe was in like the '99-2000 timeframe. I started working at Netscape and then in one capacity in HR shortly after I moved working with Mitchell as part of my shared responsibility, I worked for Mozilla.org and sustaining engineering to sustain the communicator legacy code so I supported them administratively. That's basically what I did for Mozilla.

I did a lot of I guess what you kind of call of blue activities where we have a process whereby people get access to our CVS repository so I was the gatekeeper for all the CVS forms and handle all the bugs that were related to CVS requests, that kind of thing. Right now at Mozilla, I do quality assurance and I run both our domestic online store as well as our international store where we sell all of our Mozilla gear.

Tom Scheinfeldt: Are you working generally alone in small groups? In large groups? How do you relate to other people working on the project?

MK: Well, it's a rather interesting project. My capacity as a QA person, we basically relate with the community quite a bit because we have a very small internal QA organization. All along, as the project has gone from its very inception, the community has been a very important part of our project. So I work most closely with the other members of the QA team, which is very small—we only have a handful of people—and pretty closely with the community members on an ongoing basis to help us test all the products.

TS: Who's in charge of the QA group? And who decides who's in charge?

MK: Well, it's interesting. We just recently— We now have a QA director. Before that, it was a much more loose kind of thing where there wasn't really anybody in charge. Being an open source project is like I don't like to think of it in terms of people in charge. I like to think of it as a collaboration. I think that an open source project like what we develop is very much like I feel— I studied film at USC and I feel like film that a lot of times the— You can't give too much to the director because film is a collaboration where all the parts, I mean, the cinematographer, the person that writes, the person that directs, it's all like synchronicity. And I feel the same way about our project is that's how it has to be. We take a lot of input from the community and we kind of like provide guidance but we like to take in a lot of what of the community gives us. That's how I look at it.

TS: How then are most decisions made? If a decision needs to be made on a certain thing or, another way to put it, how are conflicts resolved between those players?

MK: I think it's changed a little bit. As we're becoming more structured— As more structure is coming to the project, I think that that may change a little bit. And also our product has changed. Before it was the Mozilla Application Suite. Now we have separate Firefox and Thunderbird, so we have different communities and different players. Again, I think we take in a lot of input from the community and from all the different people within the organization and that's how we work to resolve conflicts. A lot of discussion and talking and maybe it's through emails threads. Maybe it's— The community is hard because our people all over the world, so you can't really always get on a conference call and resolve something. A lot of it has to be done electronically.

TS: That was actually my next question is how generally do you communicate with people?

MK: Well, we do it through newsgroups, a lot of newsgroups postings. We have a quality assurance blog where we put out blogs communicating what we want from the community as far as participation and kind of a day in the life of QA, what we're kind of doing on this end from like an infrastructure perspective, so most of our communication is all just out there. Blogs are huge. I mean, everybody in our Mozilla organization has a blog. Probably some of them are followed more closely than others, like Mitchell and Asa's, but people look to the blogs for what's going on in the project.

OR: So you think that's working best right now.

MK: Oh, yes. I think the blogs are— And I remember when I first started at Mozilla, blogs were— When somebody said to me, blog I didn't even know what it was and that was when blogs weren't really hip as they are today. Now, it's such a huge— When the social anthropologists look back, they're going to say, wow, that really revolutionized the way people communicate and how people participate in different projects, all the way to democracy.

TS: Do you see any drawbacks to sort of communicating electronically rather than being able to work in close quarters with people?

MK: There are some drawbacks. I, myself, having worked at Netscape liked the idea that we were all in a building and I could go track people down if I had a question. Our organization, we have a mix of people that work in the office and a mix of remote people. Then factor in the community who are located all over the place. It's a different kind of communication. We rely a lot on IRC—the IRC channels—and some people find that a little bit impersonal and just like in instant message sessions, you can sometimes misinterpret what people say, but I think that some of us have gotten so good at the culture of Mozilla and dealing with people on IRC that we're very good at it. Whereas a

newbie might not be as good as it. So I think that we operate very well in the digital electronic space just because that's how it always kind of been.

TS: Do you have any examples of how there have been miscommunications or any stories about—

MK: I can't recall any specific stories but I know for myself personally I've had miscommunications and misunderstandings of people in instant message communications where they've tried to convey something and I haven't gotten it. And I know there's been a couple of instances where one of my co-workers has said please get on the phone and talk to me; I don't understand what you're saying in IRC. So there are some people that can't negotiate that space as well as others, but I think in general being such a developer-centric community, all those people came to us from IRC. Like I don't know if you know Stuart Parmenter, nicknamed Pav, who's in the documentary *Code Rush*. He was known on IRC as Pav and kind of like he formulated his persona through IRC and then kind of came to us that way and people had no idea that he was only a kid, they thought he was an adult. And here's a kid that was hacking that was, I don't know how old he was, maybe 12, 13 years old, so that's how—he was just on IRC and he was hacking away at Mozilla and he still works with us.

TS: That sort of brings up another question—working sort of more on the business side, the administrative side of business, if we want to call it that, do you see any differences in culture between the people who are sort of developers/engineers versus people who are the smaller group of people who working on the administrative end of things.

MK: You're talking about our organization as it exists now?

TS: Either and both and how has that changed over time?

MK: Yeah, I mean, it really has— I mean, our project, when I first started, Mozilla.org was we had a weekly staff meeting. It was a small group of people. It was just a very different— We weren't as well known but we had a core group of developers that always worked with us. And we harvested— Netscape actually harvested people out of the Mozilla community into the Netscape project. That's how we built our engineering base. As a good hacker would be identified, we'd identify him and then he'd come into the project. Netscape would hire him. And that's kind of how we built up our project. And things changed over time but the core group of people who are with Mozilla.org are still with the project.

If you look at it now, it was people like Mitchell, like Frank Hecker, Dan Mosedale, Gervase Markham, many of the people that sat with me in those meetings years ago back in '99 are still with the project, which I think is an interesting thing that people have had like a passion for Mozilla that's carried through all these years but it's a much different project than it was. Firefox just exploded.

I mean, Mozilla was like kind of a little bit under the radar. People were like using it and hacking on it but it wasn't this big— There wasn't this big explosion, this big adoption. This has been kind of an interesting thing for us to deal with because, for me, the scale of it— I never realized that we were going to have millions of users worldwide and it was going to explode like it did. If somebody had asked me that back in '99 I never would've believed I'd be sitting here and we'd be Mozilla Corporation and it just really— It was pretty unbelievable.

OR: That's interesting. Why do you think that Mozilla Firefox has been able to attract so many users?

MK: Well, I think that when the core group of people— So the Mozilla Application Suite was a much larger animal. I mean, it had the mail client in it, it had the browser, had a chat client, had composer, the HTML editor. So I think that when the people that were working at Netscape, they were kind of unhappy with the way things were going and, remember, that we were always under Netscape's like— Mozilla was built as a base of Netscape but then they would throw all this stuff on top of it that a lot of people didn't like. We didn't get to make a lot of decisions about the UI at the end of the day and there was a lot of things that Netscape wanted to add on top of it, but I always liked just the core base. I used to just run Mozilla. I used Mozilla Mail and I used the Mozilla browser.

So at some point I think that there was some level of unhappiness with the developers at Netscape with how things were going. They sat down and said if we could make a browser that, you know, how would we do it? And so David Hyatt and Aza Dotzler who works with us here, Blake Ross and a few other individuals just sat down and thought of the things that are important to users without doing like a big usability study and all of that and they came up with Firefox. And then at some point the Thunderbird kind of followed after that as a separate email client, but I think it was simplifying things, making the browser faster, not so bloated that the Mozilla Application Suite is a huge download. Firefox is a much condensed, more condensed package to download, but I think that really the usability when you look at Firefox compared to Mozilla, that's what people really liked.

TS: That actually raises another question that we have is that during the early development of Firefox, the CVS was restricted to sort of small group and how was that decision made? Why was it made? How did that group get together?

MK: The group of people like— You're talking about like David Hyatt and the group?

TS: Yes.

MK: I don't know. I think that they— I wasn't really— When I was at Netscape, I was aware that there was like something going on, but I wasn't really— Like Asa's a very good person to ask about that particular question because he can speak more to how that alliance kind of formulated. And I'm not really sure, but it was definitely people who

had some level of dissatisfaction with the way that the browser was currently and thinking that they could hack it. And there was also a story I was told that some external person that was hired made some comment about Gecko and it got people incited to a level that, hey, now, Gecko and ZUL are the way of the future that, you know, we'll show you kind of thing. So I think Chris Hoffman mentioned to me a story once that speaks to some external influence also of making somebody mad enough to say that we could do better and they sat down and did and in their spare time they hacked. And Dave Hyatt is a very experience engineer. He's a level of like a chief architect. Now he works at Apple and I think he was instrumental in Safari as well.

TS: What do you think sets Mozilla off from—or Firefox, in particular—off from other open source projects? What's different about Mozilla, the culture, that has made it so widely successful?

MK: I don't know. I think that what I brought up about people being— having a passion for it and we've been able to keep true to like our hacker, kind of like our hacker mentality to the same— Many of the same people and I shouldn't only say the same people that I sat with in those Mozilla.org staff meetings but many of the developers are still working with projects. Something about the project as a whole that attracts people and people like. And the sustainability that we've been able to get from a lot of the engineering team, some of the same players like— I just can't even believe the number of people that have kind of still hung around and there's something that's attractive about—

And I think to a certain degree, too, we liked kind of always being the underdog. I liked it better when we were flying under the radar, than being so much like the feature attraction because it adds a certain level of pressure and expectation. Before we didn't have the expectations because we were always kind of like, oh, you know, Mozilla's, you know, people are using it and now with the market share so high and everybody talking numbers and thinking we're trying to slay Microsoft, David and Goliath kind of comparisons, it puts us in a much different situation than we were, but I think the overall thing is that people are just— They're just attracted to—

And I think when we made the switch to Gecko, to people that that was attractive to people and ZUL is still. There's a lot of potential to still be creative in the browser space I think and also in the email client space. People like building off that, almost like building up Mozilla as a platform.

OR: How would you compare Mozilla's vision back in 1998 to today's reality?

MK: Mozilla's vision— Well, again, it was so much less formal then. Mitchell would probably have some good answers. See, the thing is I joined and I wasn't as entrenched in the project as she was, so like her idea of the vision and my idea of the vision probably wouldn't necessarily mesh, but it was a lot less formal, but I think that we were just— I'm not really sure we were— We were concerned with making a good product but there wasn't the— Again, the visibility of Firefox has brought a great more deal of pressure, I

feel, and maybe others don't really feel it, but now like when we're out there, there's expectations and with Microsoft trying to do the next Internet Explorer. Of course, they're going to match our feature parity and everything— we didn't have those worries and those concerns back in the early days, so I think our vision was simple and I think what was articulated as kind of like a mission statement is keeping the Internet open and free and giving people choice and an alternative. That's kind of more what Mozilla was about is like if somebody wanted to use a different browser other than IE, then we were offering them that chance. So I think that, to me, has always kind of been the vision is giving people choice, keeping the Internet open and free and just a free product that everybody in a community can contribute to.

TS: With the popularity of Firefox then, what kind of expectations do you, even just you, do you feel in your job? What are the new challenges?

MK: We have a lot of new challenges. I think that right now we're— In the early days of Mozilla, we only had the Mozilla Application Suite and, of course, Netscape that was built of it. Now, we have more than we're maintaining. We've got a 1X branch that we're still maintaining. We've got 1.5 branch that we're doing releases on as well developing Firefox 2 and Firefox 3, so we have to continue to innovate in the browser space but at the same time maintain many more releases than we ever did in the other days with a much smaller subset of people from a QA perspective.

In it's Netscape heyday, client product development had over 250 people. That was engineering, marketing, quality assurance. Say there was maybe 50 QA people and each QA person at Netscape had responsibility for one area of the browser. Say one person did the installer. One person did bookmarks. Today, our QA— We only have like a handful of people covering that more of a wider swath because we don't have just one product, we have multiple products. And we actually are still maintaining the Mozilla application Suite; I think that the 1713 will be the last release. So we have Mozilla Application Suite, Firefox, and Thunderbird 1X branches and Firefox and Thunderbird 1.5 and then developing to the future 2.0 and 3.0 for both products, so that's a pretty full plate.

TS: How are things different today than you would have expected them to be? If you had thought forward from 1998-99 and where did you think things would be in 2006? Can you even remember?

MK: I think it surprised me a little that we ended up getting so much visibility. I wasn't as intimately involved in what was going on with the people who are developing Firefox, but even after we developed Firefox and I started working with the Mozilla Foundation— They brought me and I was actually working at Goggle and Mozilla Foundation, Chris Hoffman asked me to come to help out with 1.0 and even with 1.0, it still astonishes me that the numbers that we were able to get. I'm not so sure I even thought that, you know, we'd just keep growing. It just seems like almost exponentially because just when I go back to the simple Mozilla.org roots, it's just— The explosion has just exceeded what I would've expected.

I thought maybe the project would— I always thought the project would continue and have sustainability because the same thing, there was always people interested but now that the visibility has gotten higher, there's even more interest.

TS: Do you see any dangers in the kind of visibility that you've achieved? Are there any threats as well as promises?

MK: Well, I think as you get more visible, I think that unfortunately more people have come out of woodwork from a security standpoint and tried to exploit the browser and email client in different ways. I think we're seeing more of that probably than we did in the early days because as your visibility increases, I guess there's always people that want to see you fail for some reason. We don't know exactly who these people are, but it ends up— You end up spending some degree of time having to worry about security vulnerabilities and that kind of thing and then when you're more visible, people expect you to react to them more quickly and resolve them which we do— I think Mozilla has always done a very good job at, versus Microsoft who may take a month to respond to things, we respond to things very quickly. But I definitely think that there's been more of that kind of thing going on as Firefox and Thunderbird have become more popular.

TS: How about in terms of the development, the culture of developers in the Mozilla community? Has the success of the project, Firefox, but the other projects changed that culture at all?

MK: I think that it may have a changed a little. I don't think a lot. I still think we're having to negotiate different kinds of things than we may have had to before. Like I said, there was a difference. We didn't have like such a formalized marketing plans back in the early days. Now, I think everything's become a little bit more formal now that we've gotten market share and that we're larger and we've gotten more visibility. As far as the developer community, again, I don't really see huge differences, except that we're able to now hire more people to work, you know, paid, than we did in the early days of the Foundation and Mozilla.org in the early days was much more— Very little— I mean, Netscape was paying the developers, but fewer paid developers and more community people and now we have people who can be paid to just work on Firefox.

TS: What's the relationship between the people who kind of work here and are paid to work on this, either here or at Google or people who are kind of paid to do this and people who volunteer?

MK: I think there's good working relationships. We have a lot of engineers in the community that work with our developers here and have good relationships. There's a lot of a people that like to hack on Mozilla that can't do it full time, but when they have time, like on the weekends you'll see a lot of activity. You can't believe the number of bugs that get filed in Bugzilla on a weekend because that's when people who don't work 9:00 to 5:00 during the week or whatever have time to have their little niches. I know Scott McGregor who works on Thunderbird, we often reward a lot of people in the

community. There's some professor at either MIT or Harvard that has some little niche area in Thunderbird that he likes to contribute to and he does that in his spare time and he's not paid for it, but he just like feels that this particular area of Thunderbird is interesting enough for him to devote time to, to work on in kind of his spare time. We see a lot of that kind of thing.

OR: Why do you think people volunteer?

MK: Well, I think you have to look at it as why do people just volunteer in general. I think that they just— It's something they like to do in their spare time, something that they have a passion for, something that interests them. I think engineering and coding is challenging for people. Asa's talked about people who got interested in Firefox. One woman broke up with her boyfriend and she got involved in either triaging bugs or just something to take her mind off her problems kind of thing. So we have people come to the project for all different reasons but I think it's in general people just enjoy what they're doing.

I think from a QA perspective, the people that come on an ongoing basis like the challenge of finding defects, kind of the things that I like to do, trying to break the project, crash it. There's lots of things in QA. You have space to be creative even in QA to do different things to challenge you, basically. It's challenging.

TS: The Spread Firefox website says that Spread Firefox was founded on the same principles of community involvement that drive the development and testing of Firefox. How do you see open source principles interacting with marketing? Does the marketing of an open source product differ from the marketing of a commercial product?

MK: It may a little. Again, this sounds like a great question for Asa. It's more of his area, but I guess going back to like just thinking about how big a thing *The New York Times* ad was and that whole effort. And people out in the community willing to contribute money to get Firefox exposure in *The New York Times*. And then kind of like there was some degree of like criticism levied against that of whether that was even a good use of or expenditure of funds. Shouldn't we have been putting the money back into the project? Like what if we had taken all the money that we put into the ad and put it back into the project, invested it, or was it more important to put the word out there and do marketing, as you say, for an open source project, so I think that there's some degree of—

I'm not so sure Firefox needed— It needed some degree of marketing but it also is one of those things that spread a lot by word to mouth I think and by people by referrals. I think there is— Certainly Spread Firefox helped a lot and those kind of like community efforts at that level versus— I'm more in favor of doing that kind of thing than taking out big ads and they're even talking about doing like television ads for Firefox and I'm not so sure that I really like that. I kind of like a different approach to marketing, more getting out to the level of our users, the mom and pop kind of thing, rather than maybe like doing

a spiffy spot that's going to be like a Super Bowl commercial or something. I don't think we're going to do that, but something like that.

OR: Why not? It is just because of the money that would be involved?

MK: We're having this Firefox flix contest. I'm looking at the some of the submissions that come in and what has really struck me about all the entries so far is that people are not creative. What they're doing is they're taking the existing television ads that are out there and just re-working Firefox into them instead of coming up with messaging that to me would be kind of like, okay, here's a message you'd want to get out for Firefox like that it's more secure, whatever, and building something around that. Instead, I see people taking existing marketing campaigns that other people have done and plugging Firefox in. So even our community in trying to like create things, so far we haven't gotten all the entries yet, but what I've seen so far has not really wowed me as far as people are using like the Vonage— There's like music that goes along with that ad or something. I'm just waiting for somebody to come up with a really cool ad that doesn't like use messaging from some other company. I really know I'm not describing it that well, but— And I think we probably will get one. I just haven't seen it yet. But I like the principle of having the community actually try to develop ads and messaging for us I think is pretty cool.

TS: You mentioned that you work on the online store.

MK: Yes.

TS: Who are the people who are buying Firefox gear and why do you think people want to wear a Firefox T-shirt?

MK: Very interesting question. I think there're a couple of things there. So, historically, the Mozilla like engineering demographics or people who follow the project have always liked T-shirts. And for our various releases, we always did do T-shirts. The Mozilla hack T-shirts still stands as like one of the most popular T-shirts of all time, that people really love. So I think our kind of culture always liked T-shirts and then when John Hicks designed the Firefox logo, for some reason people really like the logo and I think that that kind of took off. I think if we had a bad logo for both Firefox and Mozilla, but I'm not so sure we would sell T-shirts, but our store— The bread and butter of our store continues to be T-shirts and CDs.

A lot of people buy the Firefox and Thunderbird CD set and the reason may be that they want to just have it so if their computer crashes— I don't know why people buy it and you don't download it except they maybe they have dial-up and it's too slow. But we sell a lot of apparel and we sell CDs. And in the beginning time of the store, we had a guidebook that went with the CD and I suspect that in like around the 1.0 days when Firefox was newer, we had a lot of new adopters and they wanted a little guidebook to learn how to use the browser and we were getting like the mom and pop demographic who was coming to the store and they really didn't know how to use the browser or

somebody's grandmother or something like that. So it's been kind of interesting to see the store, but I have been working with the store since the beginning and I can tell you that we still continue to do very well with the T-shirts. The T-shirts are the best sellers.

TS: What do you think it is about the logos?

MK: I've heard— I've seen comments in news groups and postings and things that people like the logo and Firefox is kind of like a cool like aura to it or something that people like and I'm just astonished at the number of T-shirts that we sell and I've seen people all over the place. I've been in airports, at JFK airport and seen people with Firefox T-shirts. It's become more recognizable over time. Before, like the Mozilla— If somebody saw a Mozilla shirt, it would be like the Mozilla community would have just recognized it but now with Firefox, I think we're getting more mainstream recognition of our logos and we're getting people who want our logo so bad that they're going and creating their new merchandize even though we're trademarked and copyright everything, they're trying to sell Firefox shirts, so it's very interesting.

TS: Have you ever contributed as a volunteer or an employee to any non-Mozilla open source project at all?

MK: I don't believe so. No, I've done some volunteer work and contributed to other projects but not specifically to an open source project.

TS: How would you define, just in general, a successful open source project? What elements or practices, work practices or structural elements do you see as necessary for developing a successful open source project?

MK: I think the first piece that you need that's very important is you need to have— The community has to have a voice. There has to be some kind of structure to the project but it's important that all of the contributors have a say and I think we have a lot of ways in the project that people do that. We have a mechanism in Bugzilla where people can vote for bugs. If there's a bug that's bothering you or a feature that you want or request for enhancement, you can actually vote on it and people look at that and if there's enough demand then we may decide to implement it.

Other successful or other pieces I think you need is you need people who are passionate and I think we've proven over and over again that we have that. We have people that are passionate; hey keep coming back. But the voice and the participation of the community and the participation of a wide group of people from all different parts of the world, coming from all different—

Like not everybody in our project is an engineer either. Like I said, we have professors, we have— We just have like just so many different pieces and I think that's— All these pieces interacting but at the end of the day, the Firefox puzzle they make is just exquisite. And I think that that's because we have all of this participation. It's not just like the

Mozilla Corporation sits around, makes a bunch of decisions about what the browser is going to be, then throws it out there. I think it's the community.

We take in an awful lot of feedback from the community about our processes, about— even about our structure. We're very open about how we operate and we want the community— Like for the QA processes and test days and things we do, we love to get feedback. That's why we put things out on the blog. Let people communicate to us what they expect from us or what they want or what they'd like to do, what they'd like to see.

Here's the tools that we're using. What tools do you think we're going to need to use? We just talked about in a meeting a few minutes ago about a test [harness] that we're going to actually kind to [have] together and then put out to the community for feedback and let them actually hack on it. We want the community to participate in this project completely and that's why I think we're going to have success.

TS: How does the community deal with dissent? If there are arguments within the community that don't seem to be resolved, what happens with dissenters?

MK: Well, as the project has gone along, we've had people who've been problematic. We've had people who have just been troublesome to the point where— we've had people who didn't follow the rules. We have a specific set of rules that allow you get access to— to be able to get CVS access and to be able to comment in bugs and act in a responsible manner. We've had people come in Bugzilla, start swearing, calling people out and we have people that go in and say, hey, if you don't stop this, we're going to either take away your privileges or do something. I mean, it would have to be something fairly drastic but I think we have a good mechanism for dealing with people who are the problematic ones that—

Again, I think that the Mozilla structure. And there's also respected people in the community that people look to for guidance, like if somebody like Mike Shaver comes in a bug and says, hey, stop this tomfoolery, this is what has to happen. There's enough people in the Mozilla project that are respected that people will just say okay, I'll listen to that. That person, he or she is reasonable.

TS: So kind of the enforcement mechanism is an informal one?

MK: Yeah. And I said there will be cases where we would take somebody's privileges away, but it would have to be a pretty heinous offense where somebody does something, but in general, we allow a lot of latitude. In our Bugzilla project, we allow community members to nominate bugs for releases. We allow a lot of community participation in what we do.

TS: Who ultimately makes the decisions if somebody gets kicked out?

MK: I think it depends on what it is. It might be— If it was an engineer doing something or somebody coming— If somebody's disrupting the project, then I think you

really have to look to do some kind of enforcement and we have had— I can't remember— I mean, in the time that I've been overseeing CVS accounts, I can't even remember— I can count on like one hand the number of times we've actually ever had to revoke somebody's access where they were doing something that they weren't supposed to. We trust people to do the right thing. If we give them access to our repository, we can't really give them specific access to one area so they might— They get access to the whole thing, but I trust them that they're only to check into the area that they have expertise in. And as I said, we haven't had a big problem with enforcement.

We've had some trouble. Some people come along and as we've gotten more visibility, I see it sometimes in blogs where people will start to become disruptive and in Asa's blog, particularly I've seen it where people just— They want to come in and be a pain in the neck for whatever reason. It could be just people that are anti-Firefox or pro-Microsoft or whatever, but I think we've always had kind of like an informal process.

TS: Do you know what happens? You said that there aren't many of them. Do you know what happens to those people after they leave the community?

MK: I don't know. Some people have tried to come back and do different things. I remember there was one person that was— We gave him access to change documentation and he went crazy and started changing everything and you can't have that because documentation is very important so sometimes if you give somebody privileges to our doc repository, they can go in and start changing things and you're always supposed to like make it— check in a change comment and this person I don't think was following the policy and I think that he just eventually kind of fell off the radar. But you do still have to some kind of like enforcement and structure because you can't have people coming and just disrupting everything or you're never going to be able to move forward. And Bugzilla has grown big enough now with the number of bugs and since it's our main place that we kind of transact business that there has to be some kind of like checks and balances of things that go on, so when people start to act inappropriately, I think usually someone in— And sometimes it's somebody in the community that steps us and says, hey, you're being silly kind of thing, but we don't really have a huge problem with that in our project that I see.

TS: I'm asking this because one of the big questions I think here is what constitutes membership in the community and how you become a member and how you stay a member and how you participate as a member of the community and so sometimes one of the interesting things to talk about is how you stop being a member of the community to see kind of the opposite, but— We can move on. Do you consider open source projects and Mozilla, in particular, as public service?

MK: I think you can look at it in a way. I think we're providing a public service in the sense that we're providing an alternative to people that's free. People don't have to pay for our product, right? There's no charge for it. You download it. If you need to get it from discs, you have to pay for the discs because we have to produce a disc and it costs money. I'd love to be able to give discs away for free, but we can't, but in the sense

that— Yeah, I definitely think we're providing a public service. It's something that people—

I mean, the Internet has become such a part of people's lives and it's going to continue to in the future and we're providing a way for people to negotiate that Internet space in a safe and secure way and we're doing things to innovate to make their life easier. Things like RSS feeds, some of these new features that are coming out that, again, are ways for people to like— just like track information a lot easier.

I think the Internet is becoming so overwhelming and all these different pieces, you have to have ways to be able to track information easier and when tab browsing came out, people thought that was great because then you didn't have to have all these browser windows open. With RSS feeds, I can be watching— As things are happening, I can be extracting and pulling down information instead of going to hunt for everything and that's where I think RSS is the next big thing. But I think that the way that the browser is made, we are definitely helping people so we're helping the public.

TS: Why do this over something that you might be able to make more money doing?

MK: Again, some of us that came to the Mozilla Foundation when we weren't making a lot of money. I had a job offer from Google that I walked away from. We do it because we love it, because it's challenging. We think we're doing something to help people. I think at the end of the day that's a good feeling.

It's different from people who might be working for— Like I often joke with my physical therapist about at the end she's helping people, too, because she's helping free people from pain, but we're providing an alternative. We're making, I think, a pretty creative product and I think in addition to all the emphasis on Firefox, I really like to talk about Thunderbird because I think Thunderbird is a great email product that also has a lot of great features that makes it really easy to be able to organize your mail, read your mail, do all the things you need to operate on your mail really efficiently. But Thunderbird doesn't get all the attention and doesn't get the huge download numbers that Firefox does, but it's a great product. So I like it and I actually like working on Thunderbird. I work pretty closely with the developer and I enjoy doing it.

And there's some other products like Minimo, our little global browser. When I first started working at Mozilla, I loved testing that. I helped Doug Turner who's the lead developer on that. We have a lot of— Our technology can be used for in lot of different places. We just have to decide where we want to invest some of that technology, like do we want to invest in a mobile space and have people walking around with Gecko-enabled web phones. Is that something that Mozilla wants to do, because there's a lot of potential.

I mean, we've already proven that we can take our footprint, shrink it, and it can run. It's just how much further do you want to take it and what kind of devices in the future are going to be more powerful and more engaged to be able to make browsing— You know,

browsing on a big computer screen and browsing on a small mobile device are very different so you have to make the experience good and some of the page layouts today are so— They render so crazy that to compress that into a small footprint and still be able to operate in it, so I think that's the challenge and Doug has done some great things with making even tab browsing in a little mobile Minimo.

TS: How does the organization or the community sort of decide to follow that path? When is the decision made to say we're going to put some resources into this?

MK: Well, I think it's kind of an ongoing thing. I think this is one of the things now that we've become— You know, with the Foundation, the Corporation, is I think we need to find out what our path is going to be. I think there's discussion amongst the different players in the organization as to where do we want to be? What do we want to invest in? I think with Thunderbird- I mean, Firefox is right now the premier thing.

Thunderbird and Minimo and some of the other things, even Bugzilla, is one of our products that's used by thousands of organizations. You know, how much do we want to invest in that project? It's just something that the organization has to decide I think and in concert with the community, but I think at the end of the day that we have to be able to put some resources to some of these projects to make them move forward, like Thunderbird needs to have a calendar client to really get widespread adoption. That's the piece that it's missing to take it to the next level. But in order to do that we need development help and if you can't get it from the community, then maybe you have to think about hiring internal resources.

The same thing with Minimo. I think Minimo kind of is a small project that has promise but it doesn't have enough developers working on it right now to get it to the next level. So I think as an organization, we have to really sit down and figure out what are the things that we want to invest in. Where do we want to be? What is Firefox 2.0 and 3.0? What's the next big thing on the web? Whoever figures that out is going to be the person that's left standing, because at the end of the day, if you think about, if Microsoft comes out with feature parity with us and has improved some of their security concerns, then people will be standing back and saying why do I want to use Firefox.

There has to continue to be innovation and that's really the challenge. And I hope that some of that innovation comes from the community, like we're talking about giving out grants to people to develop different tools and different pieces that can plug into our technology.

What about the fact that we have a great extension developer community. We have all these people out there developing cool extensions. We just finished an extension contest and some of those extensions actually are good enough to actually plug in as part of the browser, I think. So I think that that's really— That's the other thing that's really attractive about Firefox is the customizability. I really like that the fact that when the developers were sitting down trying to figure that out that they— we have an extension, a mechanism that allows you to make the browser whatever you want it to be so if I want

to have my weather, I just put Forecast Fox right down in my status bar. If I want to block ads, I install Ad Block. I mean, there isn't another browser that has that kind of customizability and that kind of sets us apart from some of the other players out there.

TS: Is there a kind of person who you would characterize as an open source person, either a developer or a user? Is there a set of characteristics that you'd point to that makes someone want to be part of this community?

MK: I think characteristics would be passion. As I said, I think a person who has passion. I think the person is interested in innovation and moving the product forward and looking for a challenge. Those are probably the three things but I think, again, passion because it has to be something that you want to do. You work 40+ hours a week and then in your spare time, you want to hack on Mozilla because you have— You think it has promise.

TS: Great. Just sort of the last question. What, if anything, do you think the popularity of Firefox, in particular, is going to do for the open source movement as a whole and what do you think the future of open source looks like?

MK: I think the future of open source is pretty bright. I think that this is— The great thing that we've been able to show people is that open source works. We've been able to make a success of open source as a sustained project over time. We've been able to keep our product free, which I think is a big thing, too. We're not charging people. I mean, there are some open source projects that have to still charge for their product. So I think that that's one real big accomplishment is we've had the sustainability. We're still here. We're able to offer a free product to people that people can use that I think is really great and there's a lot of promise for the future. I think that it's—

Well, look, the great example of what an effect we've had is I think that Songbird open source iTunes and I wonder if that would ever have come about if it wasn't for us. I think that we definitely had some—played some part in that. And one of the guys that I wanted to hire went to work for them, so—

Also the fact that we do offer open source. Look at Flock. Flock wants to do something with our browser. They want to take our browser and turn it into some social— I'm not really sure what they want to do, but anyway, our browser is— That people are taking our browser and embracing it for a variety of other uses, which I think is really cool. So I definitely think that the explosion of Firefox has a larger effect, a larger ripple on the open source and beyond the open source.

I think people also want to take Firefox and probably make money off it, too, but I think that Songbird is probably the best example of something that might not have been come around if it wasn't for Firefox.

TS: Great. That's all we've got.