

Mitchell Baker: The Mozilla Foundation

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Mitchell Baker describes how Firefox, which has its roots in the browser wars of the mid-1990s, emerged from the ashes of Netscape.

he world has witnessed many watershed events in the Web's evolution over the past 30 years. One of the most important was the emergence of browsers on desktop computers, signaling the migration of this technology from academia to the public sphere.

Between 1994 and 1996, as commercial investment in Web technologies skyrocketed, there was a war to become the browser that would gain enough market share to set the Web's technical agenda. The vendor that prevailed could expect to extract a healthy profit from the growth that everyone knew was coming.

I recently met with the Mozilla Foundation's Mitchell Baker to talk about these early days. Visit www. computer.org/computingconversations to see the video of our discussion.

MOSAIC BEGETS NETSCAPE

Mosaic, a free, open source browser, was developed in late 1992 at the National Center for Supercomputing Applications. When the NCSA offered Macintosh and Windows versions in 1993, the commercial world took notice. From these humble beginnings, Netscape Communications Corporation emerged in early 1994.

Important young engineers at NCSA, notably Marc Andreessen, were recruited to work for the new company in Silicon Valley. For a while, it appeared that Netscape would not only succeed but actually dominate the market. This, of course, greatly threatened Microsoft, which led to its major investment in what would become Windows 95 and Internet Explorer.

With Microsoft's entry into the marketplace, Netscape had to adjust its strategy to remain relevant, ultimately creating and funding mozilla. org to develop a hybrid approach that blended open source and proprietary code. According to Baker,

Instead of Netscape versus Microsoft, Netscape would gather contributions of volunteers and other commercial partners and then build a product that would be shared. The Netscape leadership knew that to be open source, you had to be real. You couldn't just say, "We're open source now—love us," you really had to manage it differently. At the time, there were eight of us employed by Netscape as mozilla. org staff and another 100 or 150 as engineers, building the Netscape

product and contributing their work to the Mozilla open source project.

The technical direction of the forprofit effort changed when Netscape was sold to America Online: the browser now had to include features that would push traffic to AOL properties and benefit AOL partners. Netscape became less about building the "best browser" on a technical level and more about using the Netscape brand to benefit AOL. This led to friction as the Netscape browser continued to lose market share to Internet Explorer:

We at mozilla.org were an anomaly because our charter was to build a successful open source project. That worked for quite a while, but there were tensions. We came to understand that we needed to rebuild our core technology. It took a long time, and while we were doing it, Netscape's market share continued to slide. These were the dark years for Mozilla. We were convinced we wouldn't be successful building a product to benefit AOL only—we wouldn't generate the kind of interest from individual volunteers or commercial partners that we needed to be successful

COMPUTING CONVERSATIONS

The long-awaited Netscape 6 eventually shipped, but the Netscape browser and brand were past the point of no return:

Netscape 6 is universally acknowledged as a bad product, the end of the Netscape product line. Internally, the management tensions continued, and the failure of Netscape 6 didn't make anything easier. We fought a lot about the user interface. UI is a constant source of tension, but in our case, it was worse because some of these fights would be how it made sense to AOL to put something in the product and its interface with a button to an AOL site or something with an advertisement in it or some feature that a partner paid for to generate revenue.

The Mozilla team maintained that the code base needed to remain true to building the best possible browser technology:

We would say, "No, you can't put it into the core product, but you're welcome to have a build system on your own and add it in later." Even in the very early days, the open source Mozilla versions of the product received a lot more testing than the Netscape versions.

Because everyone was on the payroll of Netscape/AOL, the tensions couldn't go on forever:

AOL client fortunes declined, and Netscape market share declined precipitously after Netscape 6. AOL was interested in laying off people, and one of the big layoffs in 2001 included me. My layoff was seen as a power struggle as well because by that time, the fights about what we were building and who was making decisions were pretty well known within the engineering organization. I was laid off or fired, depending on how you want to describe it, but I continued working for Mozilla as a volunteer. The Netscape engineering organi-

zation was very clear about whose leadership they were most interested in following, so we had to work out a way in which the AOL management and I could work together enough so that they could ship the product they wanted to ship but that I continued to lead the Mozilla project.

Baker worked with the Netscape team from the outside as a volunteer, and eventually a Mozilla browser shipped in 2002. It was a solid technical product but had a poor user experience and thus very little uptake. To help conserve funds for the Mozilla project, Baker also

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worked on another open source effort with Mitch Kapor, the founder of Lotus.

FIREFOX RISES FROM THE ASHES

By 2003, AOL had decided to get out of the browser business, which would ultimately lead to the end of AOL funding for the fledgling Mozilla project:

Fortunately, they knew that just killing Mozilla would be a mistake. They knew enough about Mozilla and the name and the brand to think it would be good to do something with it.

Some of the AOL people knew Mitch Kapor, so we spent a chunk of time trying to figure out what was possible. Brendan Eich [now CTO of Mozilla] was still at Netscape and very eager to make a move. Many of the key people at Netscape were desperate to keep working on Mozilla.

AOL decided to give Mozilla some money and other assets to get them started:

We ended up getting \$2 million of seed money from AOL, and Mitch was helpful with that. We also got a few other things, like the trademark, the name "Mozilla," and the four giant servers that were so important to us at the time and had taken us almost 18 months to get through the purchase cycle at AOL. In 2003, the Mozilla Foundation was formed, and Mitch Kapor was the first chairman. Bryan Behlendorf, Christopher Blizzard, Brendan Eich, and I were on the board. AOL also understood that several people would be leaving when they closed down the client group and that those people would be coming to Mozilla

The Mozilla Foundation started with 10 employees and enough money to last two years, but the browser needed major rework:

It was a little exciting, a little scary, because we knew that \$2 million wouldn't go that far and that we had a lot of work to do to make ourselves real. We were still 15 months away from shipping Firefox. We decided unambiguously that Firefox would be a consumer product, which seems obvious, but when you're a bunch of developers, it's not that easy. It means that you have to strip out a lot of the things that are clunky for a general consumer. For example, we tried to figure out what to do with the start page because we knew that links to Mozilla development tools weren't the right answer. It took us forever, and we looked at all sorts of things before finally deciding the one thing we knew everybody did was search. We talked with search providers and had a very fruitful discussion with Google.

But Baker didn't want to establish an exclusive relationship with a single partner, so she insisted that

Yahoo would be one of the search options in addition to the Google search:

We did something that I believe had never been done before, which was to make sure that Google and Yahoo were right there next to each other. I negotiated that, and it was an absolute "I will walk away from the deal" moment. You know how you get on a plane and you want a Diet Coke, but the plane only has Diet Pepsi because they have some deal? I used that example and said, "I'm not going to have Firefox users angry at us because they wanted one or the other."

The Mozilla project valued openness and inclusion as core values. Team members knew that it was important to retain real independence from any single corporate entity even if it meant failing financially. Near the end of 2004, the rewrite that was initially named Phoenix and later called Firefox finally shipped with the Google/Yahoo search box:

We had seen a rise in interest from Firefox 0.8 and 0.9 that was pretty noticeable, but once we hit the release version, it just exploded.... Internet capabilities had grown enough to where people could actually download a browser easily, and

more people had a comfort level to try it. We had a beautiful product, an important product, and the alternative was horrendous and dangerous and awful. All of that combined to create this giant excitement, and Firefox market share started to climb. It was a viral storm with nothing driving it other than the product and the market need. We had 10 or 11 employees, so we were hoping that a few million dollars from the search box revenue would support us over the next year. It turned out that we generated that amount of money in about six weeks.

With the right product at the right time, and a solid business model that brought in far more revenue than the minimum they needed to survive, Mozilla began the next chapter of its existence:

Actually, things got even more stressful and more hectic at that point because now you've kind of got the preverbal tiger by the tail and we were still 12 people. By 2005, we were in a really different world where we began to actually influence others. And that's always been the goal. I mean market share is nice, and it's nice when people love your product, but market share is only a validation that you've produced the right thing. An equally important goal is to be able to influence not only ourselves

but others in the industry so that we start to see more of the things we care about.

he modern Web owes a debt of gratitude to the people involved in the Mozilla efforts since 1998. These people held true to their principles when things seemed bleak and continued to work on a free and open product that they believed we all needed. Regardless of what browser we use today on our personal computers or handheld devices, we continue to need the Mozilla Foundation and what it represents.

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