The Launching of Mozilla Firefox- A Case Study in Community-Led Marketing[i]

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ABSTRACT

Mozilla Firefox is a Free/Libre/Open Source (FLOSS) browser supported by the Mozilla Foundation. This browser was recently released and has met with considerable success- it has been downloaded more than 20 million times and has already taken considerable market share from its prime competitor- Microsoft's Internet Explorer. In this paper, I chronicle how the efforts of 63000 volunteers led to a community successfully competing with a powerful corporation. I identify four factors as the key facilitators to Firefox' success- complacent competition, product superiority, presence of marketing leader and volunteer support. This is a work in progress. I request your comments at sandeep@u.washington.edu.

Introduction

Free/Libre/Open source software (FLOSS) refers to generally free programs that provide access not just to the executable program, but also the source code (i.e., the raw instructions that run the program). FLOSS products are now common at all levels in the computing environment- Operating system (e.g. Linux, BSD), Internet infrastructure (e.g. Apache, Sendmail, Bind), Desktop applications (e.g. OpenOffice) and Internet Applications (e.g. Mailman- an electronic mailing list manager).

Academic scholars have shown a great interest in FLOSS programs- the repository of work at http://opensource.mit.edu is a testament to the considerable scholarly literature in this domain. The bulk of the work thus far has focused on software development (Von Hippel 2001, Lerner and Tirole 2002, 2004) and to a lesser degree on user-to-user customer service (Lakhani and Von Hippel 2003). In this paper, I will discuss the marketing of one open source product by a volunteer community- a topic that has hitherto gone unexplored. Specifically, I will examine the marketing of the web browser, Mozilla Firefox. I argue that community-led marketing is an activity that is distinct from community-led software development or user-to-user customer service and hence, calls for different motivations and group structure.

Mozilla Firefox is a FLOSS product supported by the Mozilla Foundation. It faces considerable competition from Microsoft's Internet Explorer (IE). IE has a massive distribution advantage- IE comes pre-installed on every computer that runs Microsoft Windows while users have to download Firefox from a web site and install it on their computers. Despite these odds, the community has launched an exemplary

marketing campaign that has led to 20 million downloads of the Firefox browser at the time of writing. The upward download trajectory since the official launch is shown in Figures 1a and 1b and tells an impressive story. This success of the Firefox browser flies in the face of the views of some that FLOSS products are suited only to technically oriented audiences. The community is already setting its vision at 100 million downloads.

A survey released by WebSideStory on Jan 12, 2005 reports that Microsoft's Internet Explorer's share is down to 90.6%, the lowest in three years[ii].   The community goal is 10% market share. Even the then-Microsoft owned Slate magazine carried a story favoring Firefox[iii]. As a result of this remarkable campaign, the marketing of Firefox has become a shining exemplar of what is possible when a user community rather than a corporation creates and implements a marketing campaign.

[Insert Figure 1 About Here.]

The Mozilla Firefox story is one where the individual user becomes a marketing agent and exploits the power of the Web to meet marketing goals. The 63,000 volunteers who have made this possible have used the Web as a marketing forum to organize to maximize downloads. Volunteers have spread the word by linking to the main download site, blogging about Firefox, adding a link in their e-mail signature file, putting up buttons on their web site, collecting testimonials and visiting technical sites to vote for their favorite browser. The result of these myriad seemingly small marketing activities has seen the establishment of Mozilla Firefox as a credible competitor in a tough marketplace dominated by corporations.

Marketing is an expensive activity. Advertising in a marquee space takes money. Realizing this, the Mozilla community launched a fund-raising drive and over 10,000

volunteers donated $30 each to help launch a full-page ad in the *New York Times* (See Figure 2).   Thus, unlike a corporation with a large marketing budget, Firefox' budget is comprised mostly of user donations- a path not usually adopted even by non-profit corporations who tend to use donations for program activities rather than marketing.

[Insert Figure 2 About Here.]

In this paper, we will use a case study of Mozilla Firefox to gain an in-depth understanding of community-led marketing.

Community vs. Corporation

The literature in marketing has long assumed an asymmetric relationship between the corporation and the consumer. The consumer is viewed as a passive recipient of marketing messages from the company and the company is only interested in selling the consumer a product. It is no wonder then that empirical studies routinely show that consumers have a negative attitude towards advertising (Triese, Weigold, Conna and Harrison, 1994, Mittal, 1994), relationship marketing (Fournier, Dobscha and Mick, 1998) and marketing in general (Sheth and Sisodia, 1995).

Two bodies of literature describe how consumers organize themselves into communities and the relationship between those communities and the firm. The literature on brand communities views the brand as an organizing principle for a group of loyal consumers (Muniz. Jr. and OGuinn 2001, McAlexander, Schouten and Koenig 2002, O'Guinen and Muniz 2004). The activities of these consumers help the company by reinforcing strong brand relationships. Similarly, the literature on user innovation focuses on users as sources of innovation. Some studies look at lead users as sources of

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new product ideas (Morrison, Roberts and Von Hippel 2000). Other studies in this literature propose thinking of the user as a person who helps create custom products- e.g. through user toolkits (Von Hippel and Katz 2002). Thus, in both bodies of literature, user activities are beneficial to the firm and users are not necessarily pitted in an antagonistic or competitive relationship.

In contrast, the central tenet of community-led marketing is that consumers exert their power in the marketplace through collective action. **The new idea is that a user community produces, markets and services a product that competes favorably with corporate products in the marketplace.** Here are some tangible examples of communities that compete with corporations-

- Many Free/Libre/Open source programs compete with their corporate counterparts. Here is a partial list-

    o Linux competes with Microsoft's Windows operating system, IBM's OS/2 and Apple's Mac OS.

    o Apache competes favorably with products from Microsoft and Sun.

    o Open Office competes with Microsoft's Office, Sun's StarOffice and Corel's WordPerfect Office.

- Wikipedia (www.wikipedia.org), a product developed by volunteers, now competes with corporate encylopediae such as Encarta.com and Britannica.com.

- Slashdot (www.slashdot.org), a technical community that compiles the most important news for self-confessed nerds is well regarded and competes with other technical content providers for user traffic.

In all these cases, a product that is developed by a group of users competes with products made by corporations in a competitive space. The user community takes an aggressive role- their interest is not in helping a corporation, but establishing the credibility of their product in the marketplace.

Interestingly, products developed by users have been very successful in their efforts to compete with corporations. These products are not just low-end also-rans. They are market leaders in many cases and are seriously affecting the revenue of large and successful corporations. As shown in Figure 3, Apache has consistently outperformed products from Microsoft and Sun in the marketplace. Similarly, as shown in Exhibit 1, Wikipedia's size is comparable with the largest encylopediae.

[Insert Exhibit 1 and Figure 3 About Here.]

Making the source code open to all is a business strategy. In the world of software, access to the code is a precondition to success. Providing open access creates an environment where any interested party can innovate. Thus, open source is a useful strategy to create many agents of innovation rather than a few. In the case of Mozilla, this was the correct choice since the competitors offered free products and controlled distribution.

Open source products build a community of interested individuals around themselves. These individuals help test the product, provide customer service to others, provide feature requests and also, help market it. While some of the developers may be involved in the marketing, a new group of individuals may get involved in the marketing of the product. The motivations of these new individuals may be worth investigating.

THE MOZILLA FIREFOX CASE STUDY

Background

The Mozilla project is an offshoot of the Netscape browser. Readers are encouraged to see the timeline at http://www.holgermetzger.de/Netscape_History.html for a detailed set of events relating to Netscape. A longer description of the first round of the browser wars is available in Cusmano and Yoffie (1998). In short, Mozilla was released as an open source version of Netscape in January 1998. Since that time, Mozilla has released many versions of its browsers. Netscape and AOL use its browsers. Firefox is the latest version of the Mozilla browser.

Product Philosophy

A small team of three motivated and talented individuals, Blake Ross, Asa Dotzler and Ben Goodger, developed Mozilla Firefox. Others helped at different times. However, it was mostly these three people pushing the envelope on the process and deciding what gets in. The manifesto used to guide the development is shown in Exhibit 2. This once again makes clear that the small core team drove the product development process here. This is consistent with previous work that found that most FLOSS projects are small (Krishnamurthy 2002). The document clearly discourages individuals from submitting bugs and plainly tells readers that this process is a meritocracy.

<div align="center">

[Insert Exhibit 2 About Here.]

</div>

The core Mozilla Firefox development team was interested in developing a very simple product. Blake described this philosophy in this way[iv]-

> I remember sitting on IRC with Dave, Ben and Asa painstakingly debating feature after feature, button after button, pixel after pixel, always trying to answer the same basic question: does this help mom use the web? If the answer was no, the next question was: does this help mom's teenage son use the web? If the answer was *still* no, the feature was either excised entirely or (occasionally) relegated to config file access only. Otherwise, it was often moved into an isolated realm that was outside of mom's reach but not her son's, like the preferences window.
>
> This policy emerged from our basic belief that, for the 99% of the world who don't shop at Bang & Olufsen, a technology should be nothing more than a means to an end. Software is no different. In this case, people had plenty of obstacles to the web already—popup ads, spyware, and that damn monkey who gets punched and keeps coming back for more—before Netscape decided that the only way to surf was with the aid of twelve managers, fourteen not-so-subtle links back to AOL web properties and other inane gadgetry.

The Campaign

The trial version of Firefox was released on October 28, 2004, Firefox 1.0 was released on November 9th and it had achieved 10 million downloads in one month. The foundation raised over $250,000 for the full-page *New York Times* ad through user donations with an average donation of $22.

Motivated by the success of the *New York Times* ad, a group of Germans created an ad with this message- "FIRE! Hundreds of programmers jointly developed a revolutionary Internet browser. They volunteer their time and donate it to the whole world. Therefore, 2403 individuals and companies financed this ad to tell you: Firefox 1.0 is here. Free download at http://www.mozilla-europe.org/de/". The ad was featured in the business section of the Frankfurter Allgemeine Zeitung.

Virtual Organization

One of the main features of the Firefox marketing campaign was that the community organized many distinct web sites. All domain names and hosting services were donated. These web sites were-

1- Download site- This was the site that everybody had to visit to download the browser. This site is located at- http://www.mozilla.org/products/firefox or http://www.getfirefox.com (see screenshot in Figure 4). The main purpose of this site was to act as a distribution conduit. Users visited here with the goal of downloading the product and they could do so by clicking on a link on this page.

2- Marketing site- This site is located at http://www.spreadfirefox.com (see screenshot in Figure 5). The main purpose of this site was to organize all the volunteers. Affiliates who provided the most traffic were recognized on this site. Regular updates about the number of downloads were provided. Users learnt about where the latest referral came from. Volunteers were provided instructions about how they could spread the word and could download code for buttons and banners for use. At one time, volunteers provided suggestions for potential ad slogans.

3- Browser switching site- The volunteer community was focused on one action- getting consumers to switch from IE to Firefox. Therefore, this site (www.switch2firefox.com- see the screenshot in Figure 6) was focused on this

decision. Visitors were provided with reasons to switch, stories of other

individuals who switched browsers and were encouraged to act immediately.

4- Incompatible site list- Many web sites are designed for the most commonly

used browser, Internet Explorer. As a result, many sites do not display

properly in Firefox. This site (www.defendthefox.com- see screenshot in

Figure 7) was devoted to focusing and bringing pressure on sites that were

incompatible with Firefox. Users could visit this site and provide names of

other sites that did not display appropriately when Firefox was used as the

browser.

[Insert Figures 4, 5, 6 and 7 About Here.]

All these sites were linked to each other creating a virtual organization with clear

behavioral expectations.

Role of Blogs in the Marketing Campaign

The Firefox marketing campaign also provided an illustration of the extensive use

of blogs in a marketing effort. The data provided below emphasizes this-

Google Search	Number of Entries
Firefox blog	5,990,000
Firefox (limited to blogspot.com)	176,000
Firefox (limited to livejournal.com)	23,100
Firefox (limited to weblogs.mozillazine.org)	5,990
Firefox (limited to blogs.msdn.com)	427

All major Firefox leaders had blogs of their own and have led by example. Thus,

individuals involved in product development have also played a leadership role in

marketing. Here are the three most prominent leaders and their blogs-

Blake Ross   http://www.blakeross.com

Asa Dotzler   http://weblogs.mozillazine.org/asa/
Ben Goodger(hired by Google)   http://weblogs.mozillazine.org/ben/

Here are some other interesting blogs about Firefox-

1- A detailed description of activities on the launch day is provided on Mitchell

   Baker's blog-

   http://weblogs.mozillazine.org/mitchell/archives/2005/01/firefox_10_laun_1.html.

2- An excellent example of a Firefox evangelista-
   http://blogsforfirefox.blogspot.com/

Taxonomy of Community-led Marketing Activities

The community surrounding Mozilla Firefox has performed many marketing

activities. In this section, I provide a taxonomy of these activities.

Traffic-builders

Volunteers took many actions that help build traffic to the download site. These

activities included-

1- Using e-mail signature files to provide information about Firefox with a link

   to the download site.

2- Using banners and buttons on individual web sites.

3- Provide a positive review on individual web sites or blogs.

Brand builders

These activities are seen as attempts to boost the brand-

1- Using banners and buttons on individual web sites.

2- Posting positive reviews on third-party sites.

Adoption builders

These activities encourage adoption of the product-

1- Telling others about the product on one's blog.

2- Getting other people to switch through personal contact.

Conditions That Facilitated The Success Of Firefox

Complacent Competition

At the time of Mozilla Firefox' launch, the largest competitor, Microsoft's Internet Explorer, had become a static product. Microsoft had made a strategic decision to link IE to its operating system. What this meant is that newer versions of IE would only be available on newer versions of Windows. As a result, the only changes to the product were related to the security vulnerabilities of the product. The next release of IE is not expected until 2006 "at the earliest"[v]. Microsoft's habit of releasing and announcing security patches for its products has reduced the level of user confidence in the product.

Noted computer expert Walter Mossberg put it this way[vi]-

> Microsoft's Internet Explorer Web browser is one of the most important, and most often used, programs on the world's personal computers, relied upon by more than 90% of Windows users. *But Microsoft hasn't made any important functional improvements in Internet Explorer for years(emphasis added)*. The software giant has folded IE into the Windows operating system, and the browser only receives updates as part of the "Windows update" process. In recent years, most upgrades to IE have been under-the-hood patches to plug the many security holes that have made IE a major conduit for hackers, virus writers and spyware purveyors. The only visible feature added to IE recently: a pop-up ad blocker, which arrived long after other browsers had one.

There were other browsers in the marketplace prior to Mozilla Firefox (including previous Mozilla browsers). However, none had made a serious dent. Walter Mossberg describes his view of the browsers in this way-

> There are some other browsers that put IE to shame. Apple's elegant Safari browser, included free on every Mac, is one. But it isn't available for Windows. The Opera browser is loaded with bells and whistles, but I find it pretty complicated. And NetCaptor, my former favorite, is very nice. But since it's based on the IE Web-browsing engine, it's vulnerable to most of IE's security problems.

This lack of product innovation left the door open for competitors such as Mozilla Firefox. Microsoft's decision to bundle the innovation of IE with that of the Windows operating system may prove to have been a major strategic error. This was especially so since the company is involved in a major overhauling of their Windows operating system as part of the Longhorn project. As an article in Wired magazine put it[vii]-

> Microsoft had essentially given up on Internet Explorer development - focusing instead on its next-gen OS, Longhorn. With Longhorn, the company hopes to make the stand-alone browser obsolete by incorporating Web browsing into the desktop. As part of the transition, Microsoft has created the developer language XAML, an heir to HTML. Until a few months ago, it looked like the shift to Longhorn would give Microsoft control of the Web's de facto standards. Now, with Microsoft's share in the browser market slipping - IE has lost 5 percent in the past six months, almost all of it to Firefox - Web designers can't afford to ignore the standards of Tim Berners-Lee's W3C, which Mozilla has hewed to but which Microsoft has regarded as strictly optional. Which means Bill Gates' troops must now turn back to IE and battle the ghost of Netscape.

<u>Product Superiority</u>

Blake Ross, one of the leaders of Firefox, described how users react to Firefox in this way[viii]-

> I love asking someone what they love most in Firefox, watching them fumble for a moment, and then stammer something to the effect of "it's…it's just better." The fact is that for most people, there is no one life-changing feature in Firefox, no "ah ha!" moment; the Big Thing is the sum of a thousand little moments where Firefox worked with them, not against them. If it does nothing else, I hope Firefox reminds software developers that despite "Internet time" and the constant pressure to reinvent, usability is still king.

Many impartial observers agree with Blake and have concluded that Mozilla Firefox is a superior alternative to its competitors. Here, I will argue that Firefox offers three new ideas- compatibility, tabbing and better security. Readers are referred to an older document http://web.archive.org/web/20040210101506/http://www.mozilla.org/products/firefox/why/) authored by Ben Goodger for a longer list of features.

Compatibility with other operating systems (Linux, Windows and Apple)

Internet Explorer is compatible only with Windows-based operating systems (specifically Microsoft Windows® 98, Windows 2000, or Windows XP). In contrast, Firefox is compatible with Linux, Windows and Apple operating systems. This widens the potential audience for the product.

Security

Blake Ross has argued that "there's a widespread perception that IE is not secure -

and here we are."[ix] Many experts agree with him that Mozilla Firefox is more secure

than Internet Explorer. I rely on Walter Mossberg's words again-

> Firefox isn't totally secure -- no browser can be, especially
> if it runs on Windows, which has major security problems
> and is the world's top digital target. But Firefox has better
> security and privacy than IE. One big reason is that it won't
> run programs called "ActiveX controls," a Microsoft
> technology used in IE. These programs are used for many
> good things, but they have become such powerful tools for
> criminals and hackers that their potential for harm
> outweighs their benefits. Firefox also has easier, quicker
> and clearer methods than IE does for covering your online
> tracks, if you so choose. And it has a better built-in pop-up
> ad blocker than IE.

IE has been targeted by hackers because it is so widely used. Proponents of

Firefox have pointed this out-

> Since there is such a disproportionate use of IE on the
> Internet right now, it does make it a very high-profile
> target. That's what people who are writing exploits are
> targeting, because that's where they get the biggest bang for
> the buck. If we were in a world where there were less of a
> monoculture for browsers, it would make it harder to
> design exploits that would affect that much of the
> marketplace. That's one of the driving forces of the
> Mozilla Foundation--to provide choices so that someone
> can't come up with an exploit that affects nearly the whole
> population.
>
>   -Chris Hoffman, Director(Engineering), Mozilla Foundation[x]

Some observers have argued that the use of open source as the development

methodology is a sound way to enhance the security of the product. Open source

products allow anybody to inspect the codebase, thus enhancing the chances that

vulnerabilities and bugs would be detected. There are some indications that Mozilla

Firefox may have its own security flaws, however[xi].

Tabbing

Most browsers open a new link in a new window. Mozilla Firefox introduced a

new feature called tabbing. This allows the user to open multiple pages in one window.

Once again, technology expert, Walter Mossberg comments-

> But my favorite aspect of Firefox is tabbed browsing, a
> Web-surfing revolution that is shared by all the major new
> browsers but is absent from IE. With tabbed browsing, you
> can open many Web pages at once in the same browser
> window. Each is accessed by a tab. The benefits of tabbed
> browsing hit home when you create folders of related
> bookmarks. For instance, on my computer I have a folder
> of a dozen technology-news bookmarks and another 20 or
> so bookmarks pointing to political Web sites. A third folder
> contains 15 or so bookmarks for sites devoted to the World
> Champion Boston Red Sox. With one click, I can open the
> entire contents of these folders in tabs, in the same single
> window, allowing me to survey entire fields of interest.

Even the official spokesperson of Microsoft has been reported to be hooked to the

concept of tabbing[xii].

Presence of Marketing Leader

In the context of software development, some observers have pointed out the

existence of a strong leader in certain FLOSS communities (Sproull and Moon 2000).

Similarly, this argument by a FLOSS developer points out the importance of the big

name developer[xiii]-

The sense of ownership in Open Source is much more personal. The surest test of this is to look at the longevity of Open Source leaders and the projects they are associated with. Linus Torvalds still leads Linux after nearly fifteen years. Alan Cox is still a key member of the Linux kernel team after a decade or so. Brian Behlendorf still keeps his hand in the Apache project, as he has from the very beginning. Larry Wall is still the chief architect behind Perl, after more than a decade. Eric Allman still guides Sendmail, as he has from the beginning in 1981.

The marketing leader behind Firefox' campaign is Rob Davis, a marketing professional with experience in political campaigns (see his web site http://www.playpolitics.org). Rob contacted the SpreadFirefox team after his computer had been infected by a virus and volunteered his time to run the campaign. His main focus was on the *New York Times* advertising campaign. Here are excerpts from an interview[xiv]-

Q: Where did the idea for the New York Times ad originate?

Davis: I had remembered reading about a fundraiser done by a political advocacy group last spring - they had wanted to take out a single, full-page ad and ended up raising over $500,000. Knowing that many technologists are as passionate about their software as others are about their politics I thought the idea would resonate. Having the contributor's names in the ad was done to make it a memorable souvenir for all of Firefox's developer volunteers worldwide.

Q: Why advertise in the Times and not the Journal, online or even on blogs?

Davis: The original idea was actually to take the ad out in the Wall Street Journal because of their strong corporate executive readership, however the cost was prohibitive. USA Today and the Washington Post were also evaluated. The Times offered this campaign the best demographics and value for the money.

A full-page newspaper advertisement is bold and exciting. When a large company wants to quickly convey a message, the full-page newspaper ad is a tactic of choice. I felt that there were sufficient Firefox advocates to act like a big company.

Q: Frequency is a big factor in many advertising campaigns. How does Mozilla feel it can be successful with just a single ad?

Davis: Great question - it's exactly why the Mozilla Foundation will likely never undertake an advertising campaign. Also, just to clarify, I do not speak for the Foundation. My role is simply as a manager for this advocacy campaign.

While some have considered this effort an advertising campaign, I consider it a fundraiser - something more akin to a charity ball. In this case it cost less than $50,000 to raise $250,000 for the Mozilla Foundation.

Volunteer Support

The credit for the success of Firefox must mostly be given to the volunteers for all their hard work. Since Firefox had released a preview version before its official release, it was able to ascertain the level of interest in the community. This gave the team considerable confidence when soliciting funds for the *New York Times* ad. Volunteers participated in many activities on the site. The list of community-marketing projects shown in Figure 8 provides an exhaustive list of such activities.

[Insert Figure 8 About Here.]

The tone of the entire campaign was democratic. The leaders of the campaign did not dictate what needed to be done. Frequently, volunteers disagreed with what the lead team proposed when it came to marketing. This is characteristically different from the developing environment (as evidenced by Exhibit 2), which was undemocratic with the

small core team discouraging contributions. This may provide a clue for how portions of FLOSS communities may be democratic while others are based on command and control.

Conclusion

The community-led marketing of the Mozilla Firefox browser is a great symbol of the potential of FLOSS products. At this point, this represents a new practice that needs to be understood better. Rob Davis, the marketing leader behind the Firefox campaign has indicated that this practice may be adopted by small and nimble firms rather than large companies where liability issues may drown out everything else.

My argument in this paper has been that community-led marketing works under specific conditions. In this case, we had an open source product with complacent competition, a strong marketing leader and excellent volunteer support. This is not always the case. We have too little evidence on when this technique does not work to identify general principles.

For the academic community, the interesting question will once again be around the idea of motivation- "Why is it that so many people are volunteering their time to market a product that they do not directly benefit financially from?". At this point, the answer to this is unknown. It is likely that the familiar intrinsic and. extrinsic components discussed in Lakhani and Wolf (2005), Lakhani and Von Hippel (2003) and Lerner and Tirole (2004) would emerge as important. However, the nature of the dimensions may be different. Future research will undoubtedly shed light on this.

Exhibit 1
Wikipedia's Size Comparison
[Source: http://en.wikipedia.org/wiki/Wikipedia:Size_comparisons#Comparison_of_Encyclopedias]

All *Word to number of letters* calculations are done on the basis of an average word length of five, plus a space (5+1) = 6 characters per word.

- On 1st January 2005, the English language *Wikipedia* had 411,000 articles[1] and 145 million words, giving a mean article length of 353 words. It also had 156,000 photographs and illustrations, 348,000 redirect pages (think of them as additional index entries in the form *for BBC see British Broadcasting Corporation*), 385,000 links to other websites and a staggering 8.4 million cross reference links between articles.
- The online edition of the Swedish *Nationalencyklopedin* claims to have 356,000 entries of which 183,000 are encyclopedic articles.
- The advertisements for *Encyclopædia Britannica*'s 2002 edition states that it had over 85,000 articles. A claimed word count of 55 million words gives an estimated 330 million characters, and a mean article length of 647 words. According to Wikipedia's *Encyclopædia Britannica* article, as of 2005, the EB's online version contains about 120,000 articles with 44 million words.
- The 18th century *Encyclopédie* had 75,000 entries.
- Microsoft Encarta:
    - Microsoft Encarta Deluxe 2002 is cited as having "over 60,000 articles, 10,000 historical archives, and over 40 million words", giving 156 million characters and a mean article plus archive length of 371 words. Encarta Deluxe 2005 (*http://www.microsoft.com/products/encarta/ProductDetails.aspx?pid=002*) advertises "Over 63,000 articles...with 36,000-plus map locations, and over 29,000 editor-approved Web site links."
    - Microsoft's *Encarta Encyclopedia* 2002 is cited as having 26 million words.
- *Grolier Multimedia Encyclopedia Online* claims 11 million words and 39,200 articles, giving 66 million characters and a mean article length of 281 words.
- The *Columbia Encyclopedia*, Sixth Edition, is cited as having 51,000 articles and 6.5 million words. This gives 39 million characters and a mean article length of 127 words.

Principles, Strategy, Tactics, and Concrete Design Decisions

1. CVS access is restricted to a very small team. We'll grow as needed, based on reputation and meritorious hacks.
2. This will be a single process for the browser only. Mail clients, web editors, etc, will be out-of-process. Hooks for other apps will be provided eventually, although that is not an immediate goal.
3. No profile manager UI on startup, although you can still select multiple profiles from the command line.
4. The default theme will be based on Classic, utilizing nsITheme to respects the system look and feel. Firefox will not use the old and stale Communicator icons. Additional themes will be supported but will not be part of Firefox.
5. The toolbar(s) will be configurable. That includes moving the location bar where the user wants it (not just splitting it so it takes a whole toolbar width).
6. The personal toolbar is the personal toolbar, not the whorebar.
7. All wallet-like functionality will be rewritten from scratch.
8. We will have a sidebar, but it may work differently from Mozilla's current one.
9. There won't be 239 access points for Search and for Bookmarks!
10. We may drop the throbber.
11. The interface will not be "geeky" nor will it have a "hacker-focus". Nor will it be "minimal". The idea is to design the best web browser for most people. (This doesn't mean every feature has to be enabled by default.)

FAQ

Q1. Why?

Some of us want to have fun and build an excellent, user-friendly browser without the constraints (such as unnecessary features, compatibility, marketing requirements, month long discussions, etc.) that the current browser development requires.

Others of us are simply using this as a prototype to demonstrate possible optimizations to the trunk, such as stripping overlays or separating the application into separate processes instead of running one monolithic suite.

Q2. Why only a small team?

The size of the team working on the trunk is one of the many reasons that development on the trunk is so slow. We feel that fewer dependencies (no marketing constraints), faster innovation (no UI committees), and more freedom to experiment (no backwards compatibility requirements) will lead to a better end product.

Q3. Where do I file bugs on this?

We're still chopping with strong bursts and broad strokes. There's plenty that's obviously broken and we don't need bugs on that. If you find a bug (a feature request is not a bug) and you're sure that it's specific to Firefox (not present in Mozilla) and you've read all of the existing Firefox bugs well enough to know that it's not already reported then feel free report it on the Phoenix product in Bugzilla.

Q4: Why are you guys wasting time making a FAQ?

Because we would waste tons of time answering these questions, if there were no FAQ.

Q5: How do I get involved?

By invitation. This is a meritocracy -- those who gain the respect of those in the group will be invited to join the group.

Figure 1a
Cumulative Downloads of Mozilla Firefox
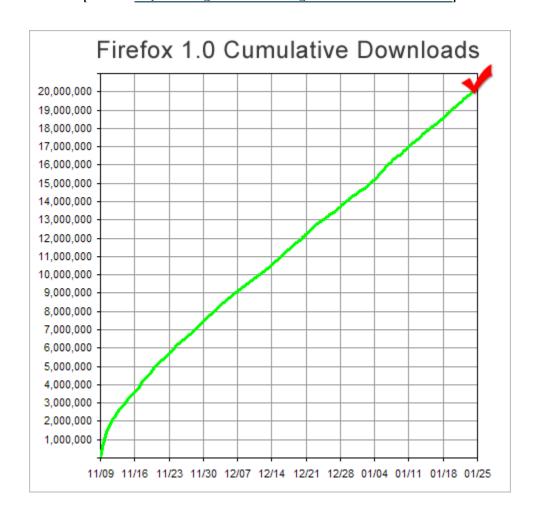[Source: http://weblogs.mozillazine.org/asa/archives/007383.html]

Figure 1b
Daily Downloads of Mozilla Firefox
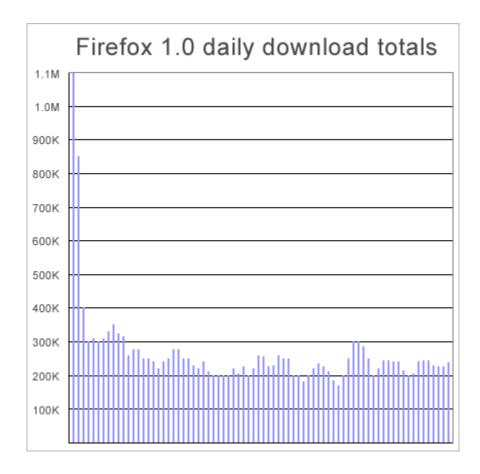[Source: http://weblogs.mozillazine.org/asa/archives/007383.html]

Firefox 1.0 daily download totals

Figure 2
Mozilla Firefox New York Times Ad

Figure 3
Netcraft's Survey Results
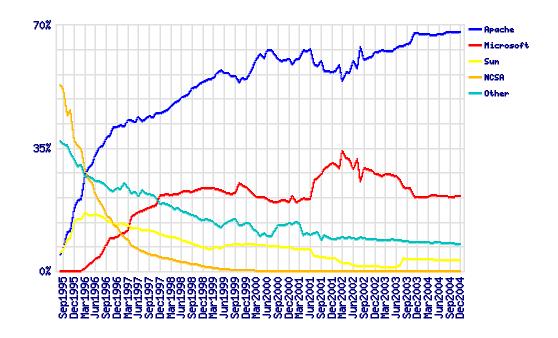**[Source: http://news.netcraft.com/archives/web_server_survey.html]**

Figure 4
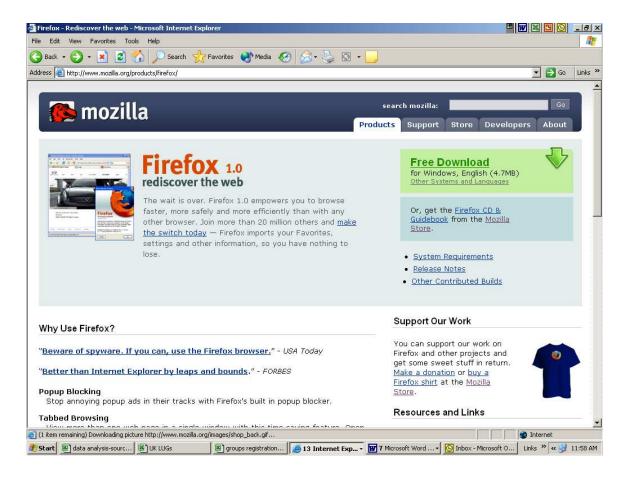**Screenshot of http://www.mozilla.org/products/firefox**

Figure 5
Screenshot of SpreadFirefox.com
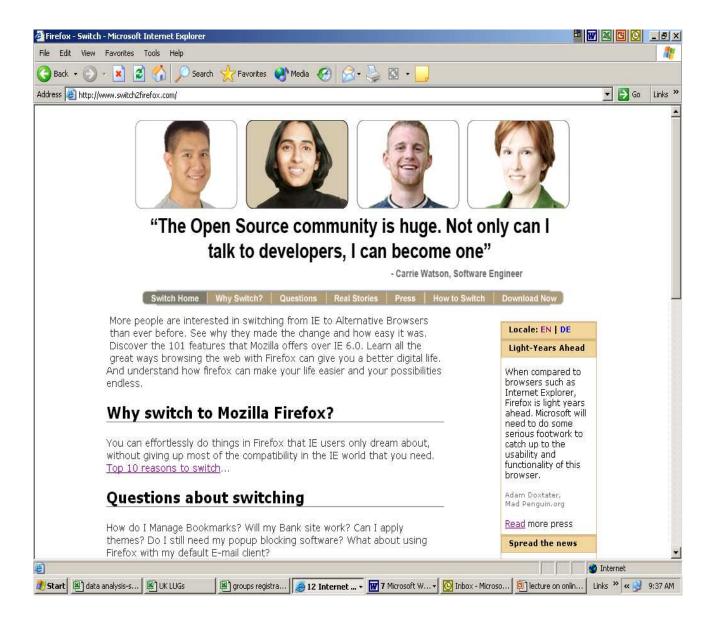
Figure 6
Screenshot of Switch2Firefox.com

Figure 7
DefendtheFox.com Screenshot

Figure 8
Community Marketing Projects

Forum	Topics	Posts	Last post
Ad Donations *Contact computer publications and leading web sites and get them to donate print or online ads that promote Firefox.*	26	54	2 weeks 10 hours ago by Seven_of_Nine
CD Deals *Contact computer publications and get them to bundle Firefox and Thunderbird on CDs they bundle with their magazine.*	6	21	3 weeks 1 day ago by hans
College Reps *Student reps at college campus around the world*	45	107	4 days 15 hours ago by Dalponis
College Reps Admins *Team that coordinates the efforts of the college reps.*	1	2	4 weeks 4 days ago by MatSayz
Donations *Email response team that responds and dispatches donations-related inquiries as necessary.*	5	6	6 weeks 6 days ago by Dreamist
Events Team *Make a database of computer tradeshows, contact them to obtain booth space, ensure a presence at these events.*	11	20	1 day 10 hours ago by LuisaoRodesiaoBR
For the Record *Monitor the media. Contact reporters when a story needs a response.*	55	75	5 days 3 hours ago by pyrotechnik
Licensing *Email response team that responds and dispatches trademark and MPL licensing inquiries as necessary.*	13	32	9 hours 6 min ago by Pall

[Mozilla Design](#) SWAT team of graphic design professionals who are available for web design, collateral etc.	43	98	1 day 11 hours ago by [PlayWithFire](#)
[Partners](#) Email response team that responds and dispatches business partnership inquiries as necessary.	14	16	8 hours 54 min ago by [Pall](#)
[Press](#) Email response team that responds and dispatches press inquiries as necessary.	40	49	5 days 2 hours ago by [ogo](#)
[Press Team](#) Volunteer team that drafts press releases.	4	14	6 weeks 5 days ago by [lynchknot](#)
[Visual Identity Team](#) The team responsible for the Firefox and Thunderbird logos, default themes and other core visual identity.	35	79	5 days 3 hours ago by [gmailinvitation.com](#)
[Web Apps](#) SWAT team of web programmers.	36	60	6 hours 7 min ago by [di0kvra](#)
[Wordsmiths](#) SWAT team of editors available to wordsmith all marketing materials.	17	39	3 days 11 hours ago by [ShadowOfTwilight](#)

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ENDNOTES

[i] Rob Davis, the marketing guru behind Firefox' campaign calls this community marketing.

[ii] Hamm, Steve(2005), "Mozilla Is Gaining on Godzilla", *Business Week*, http://www.businessweek.com/technology/content/jan2005/tc20050112_0827_tc119.htm

[iii] http://slate.msn.com/id/2103152/

[iv] http://blakeross.com/index.php?p=9#comments

[v] Stross, Randall(2004), "Digital Domain: The Fox Is in Microsoft's Henhouse (and Salivating)", *New York Times*, December 19.

[vi] All Walter Mossberg's comments taken from- Mossberg, Walter(2004), "Security, Cool Features Of Firefox Web Browser Beat Microsoft's IE", Wall Street Journal, http://ptech.wsj.com/archive/ptech-20041230.html.

[vii] http://www.wired.com/wired/archive/13.02/firefox.html?pg=2&topic=firefox&topic_set=

[viii] http://blakeross.com/index.php?p=9#comments

[ix] http://www.wired.com/wired/archive/13.02/firefox.html

[x] http://news.com.com/IE+flaw+may+boost+rival+browsers/2100-7355_3-5250697.html?tag=nl

[xi] http://news.com.com/Firefox+flaw+raises+phishing+fears/2100-1002_3-5517149.html?tag=nl

[xii] Stross, Randall(2004), "Digital Domain: The Fox Is in Microsoft's Henhouse (and Salivating)", *New York Times*, December 19.

[xiii] Source: http://www.oreillynet.com/pub/wlg/4197

[xiv] Source: http://www.micropersuasion.com/2004/11/a_chat_with_fir.html