IA/Taxonomy project - SUMO redesign

About this project

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This document concerns only Phase 1 of the statement of work, below.

Project Overview

Support.mozilla.com (SUMO) is the support website for users of Firefox and Thunderbird products. It is public and contains knowledge-base articles and forums that provide solutions to common user issues. The website navigation must be improved so that users can easily and quickly decide which paths to take to satisfy their needs.

Project goals
Create a new navigation information architecture for support.mozilla.com

Process
In order to achieve those goals, it's first necessary to analyze available data, then to create and test the proposed navigation against top tasks to ensure good label comprehension.

Outcomes
The IA will be hierarchical, but it also has product-based facets. The main deliverable will be a practical and usable information architecture "tree" for the website. See the deliverables mentioned below for more details.

Dependencies
Mozilla will need to provide data and information as possible (see below), which may entail a small amount of developer or system administrator support in order to make the data formats useful.

It would also be very helpful for the NNG consultant to be able to interview a content SME or strategist and someone who is involved in localization. If any taxonomies already exist, it would be helpful to interview the owner of those also. Interviews would be about an hour or less each and they would be done via Skype or something similar and would require no pre-work by the interviewees.

Mozilla agrees to allow NN/g to use the data from this project in a case study for publication in the future (user data would be anonymized, of course).

Phase 1: Analyze Data & Proposed IA Structure

(Estimate: 3-4 weeks, depending on how much data can be provided, when, and where the project falls relative to the year-end holidays.)

Analyze data about users and content. Identify top user tasks and top support needs. Interview two SMEs.

Potential user-data sources (What are they looking for and what do they call it?):

- Usability analysis (e.g.: heuristic evaluation, usability testing reports or findings)
- Site-search statistics (most frequent and most verbose: which words do people use when they search just this site?)
- Web-search query statistics (which words do people use most frequently on Web-wide searches to arrive at the site?)
- Traffic analytics (where people go, top paths through site, top tasks)

Potential content-data sources (What is provided and how is it named today?):

- Existing taxonomies, controlled vocabularies, style guidelines, categories, tags, metadata, navigation labels, site plan or IA tree
- Content strategy, process, tools (interview SME)
- Localization issues that might affect navigation labels (interview SME)
- The most-frequently used (top 200 or so) significant terms (words and phrases) in both the content and the support data, particularly those used in the titles, summaries, tags, categories on the company side and in the forums, chats, and other free-form user problem descriptions. These vocabulary lists need to be analyzed separately (company vocabulary vs user vocabulary).

Dependencies: Data to be provided by Mozilla:

- Results of the recent heuristic evaluation
- Site search data (desirable: last 3 months, top 300 queries, longest 50 queries, someone to help find additional things in the raw data if needed -- or access to the log files)
- Top user tasks or some data that can be used to determine the top user tasks, such as website analytics (where users go most) and support topic frequency (what users ask about most)
- Site plan, preferably as a spreadsheet “tree” that shows existing IA
- Any other data from the data-source lists above that can be provided will be helpful

Deliverable: Proposed IA/Navigation Structure

Outcome: Propose a new IA/navigation structure (hierarchy) up to 3 levels deep that takes into account the need to facet the existing information by product (Firefox, Thunderbird, etc.) and/or type of product (desktop, mobile, OS, etc.) Check this structure and labeling with stakeholders to ensure completeness, and walk through the top tasks users do on the site today.

Deliverables: Spreadsheet with preferred terms (labels for the IA/navigation). A brief explanatory document that summarizes the rationale for label choices, top user tasks it facilitates, and any interesting findings, research questions, and process recommendations that come out of the analysis.

Phase 2: Remote Test IA Structure

(3 weeks, depending on user recruitment time and number of users in the study.)

Test the IA structure with users, with an online, unattended, remote testing system appropriate for IA testing, such as Treejack and/or OptimalSort, in order to get a lot of user data quickly. The goal of this phase of testing is to check for successful task paths through the IA and to make sure people understand the labels.

This will accomplish several goals:

1. Involve target users (user-centered design) in evaluating the organization of the IA, nomenclature, and hierarchy
2. Quantify the effectiveness of the labels and groupings through collecting task success data

Deliverables: Final recommended IA structure (spreadsheets) and a brief write-up of any further rationale, recommendations, and findings.

Dependencies: Signoff on the structure to be tested, top tasks and user profile(s), recruitment of users.

(Potential follow-on project) Phase 3: Test Paper Prototypes Developed by Mozilla

Test paper prototypes and/or wireframes developed by Mozilla with a small number of users (6-8) in think-aloud qualitative usability sessions. Testing should be done at several stages of the design process.

Goals: Discover what's confusing about terms that the previous testing could not resolve, and check the performance of alternative terms and layouts against top user tasks.

Infrastructure: Informal setting, such as a rented office in Portland OR. For paper prototype testing, a digital video camera suspended over the table would be needed.

Recruiting: TBD. The user group is close to a general public web user, so a call for volunteers and screening for expertise level might be all that's needed.

Deliverables: Test plan, changes to the IA structure and labels, and a brief writeup of any other interesting findings. The goal is to rapidly iterate the designs and resolve naming issues rather than to produce formal reports.

Process: Mozilla would provide someone from the design team to play the computer for paper prototype testing. At later stages of the design process, Mozilla might provide clickable wireframes.

The NNG facilitator would manage the project, conduct the sessions, and direct the users' activities. Voice and screen (or table) would be recorded.

Dependencies: Time it will take Mozilla to create the paper prototypes.

About this document

This document serves as a record of the types of data that were analyzed in order to derive SUMO users' top information needs, and thus deduce the type of tasks they perform most frequently on the site. The focus of the effort is on findability: What are people looking for? What do they find? How can we make what they want easier to find? How can we improve search results by improving microcontent and metadata and classification?

Other results besides the top tasks include a controlled vocabulary for tagging articles, to be tested in February 2012, a synonym suggestion list for the new search engine, and a proposed new information architecture in the form of a preliminary sitemap to be tested in February 2012 as well. There are also accompanying spreadsheets that show various search data analysis results.

This document contains many usability recommendations and some key points of the IA rationale. Many of the recommendations are about things that were encountered in passing during the analysis, and they are offered in hope that they might be useful to the team working on the site redesign.

This is not a formal, topically organized report, and it may contain redundancies and some drafty wording as a result.

Presentations made by Bram Pitoyo of Mozilla raise many of the important findings presented here in a much more summarized format for those who want an overview. The devil is always in the details, though, so we encourage you to dig deeper here.

TABLE OF CONTENTS

IA/Taxonomy project - SUMO redesign
- About this project
- About this document
- Information Architecture Issues

Source: Site search logs, top 1000 queries
- Why search log analysis is so important

Source: Thunderbird team
- Source: Looking at some Thunderbird pages

Optimizing Meta-descriptions and Title tags
Source: Top (100) en-US pages
Things that stand out in the data
Further research needed
Top tasks, according to the data
Accessibility
Source: Pain Points
Forum - tech support top tasks
Answering questions
Superheroes Wanted
Source: Kitsune/KB/Audit
Source: KB word frequency list 2012
Source: Test searches on Google for some top task wording
Terminology mismatch hurts SEO
Source: SME Interviews
Source: Elena Moon's review
Search UI
Source: Ethnio Survey
Miscellaneous
Multiple home pages for SUMO
Ask a Question

Information Architecture Issues

Information architecture encompasses a number of concerns in website design, primarily:

- The names of everything
    - link text and link titles
    - page headings
    - navigation labels
    - controlled vocabularies
- The connections between things - both links and logical connections
    - groupings, categories, and relationships
    - breadcrumbs
    - the layers of navigation structures
    - landing pages for groups of related things and their explanations
    - flow: the order of task sequences, branches, and loops
    - information layering and hierarchy
- Search engine optimization
    - synonyms
    - meta-descriptions

- HTML title tags
- mismatches between the way users think of the information they need and the way the organization thinks about its information

Source: Site search logs, top 1000 queries

Why search log analysis is so important

Refining search query data is like making a molehill out of a mountain. It is always a worthwhile adventure, because this is the voice of the customer desperately seeking information from your website. You can measure your information's findability by watching the search trends change over time.

It's not enough to know what people want to find. You also need to know what they can find, what they should find, and what they do find. Search logs are mainly repositories of what people look for and what they call it, but you can also look at session data (sequential, time-proximate searches from one IP address.) From search analysis you can determine the most frequent terms, the most frequent topics, and lots of things you need to know about your website and product usability. Once you know the top search terms, you can investigate further to see what those results are, and thus tune both your content and your search engine until most of the searchers find useful information on the first page of results.

This analysis consisted of sifting through the top query terms and generating topical groups, top user tasks, and research questions from them.

The working spreadsheets that comprise this effort are linked below. It will be difficult to understand the notes fully without looking at the spreadsheets first, but keep in mind that the spreadsheets are just ways to look at the data in order to roll it up into the necessary and sufficient high-level buckets on the way to forming an information architecture that's user-centric. But the details are fascinating, so definitely glance over the cluster sort after you see the main topics.

Main Topics spreadsheet:
https://docs.google.com/spreadsheet/ccc?key=0AgscVQdNHuGudExrRkxTdW1Td0FaaWM4bE5ZeDg0Snc&hl=en_US#gid=1
2 sheets, one sorted alpha and the other by count (frequency of subtopics). The frequency list is the most interesting and most refined, so if you look at only one spreadsheet, look at sheet 2 of this one.

The purpose of this reduction is to show a high-level summary of the major topic buckets (column A) alongside their subtopics (column B) in the order of most frequency. It's only the relative difference in numbers that matters, not the exact numbers, but the numbers in some cases are quite surprising. Sheet 1 has the alphabetical sort of this data, showing a few more of the topics that were rolled up in sheet 2. Topics are just placeholder words for the various buckets.

Cluster sort spreadsheet**:**
https://docs.google.com/spreadsheet/ccc?key=0AgscVQdNHuGudGtCV1NQOUVXSWJJcURkR3VXb0tBenc&hl=en_US#gid=0
If you saw something you didn't understand in the spreadsheet linked above, this one should clear that up. It's fascinating because it shows the clusters of queries that seem similar to each other. This was the first sort of the query frequency. It shows the query terms from which the subtopics were derived and the breakdowns of those numbers in detail. Here you can also see that below the sorted 304 terms are a lot of very similar terms that would all fit in one of the buckets created from the first 304.

Recommendation: Mozilla should continue this work by analyzing the search results generated by the most-frequent queries immediately after the new search engine is put into place. If you can tune your search engine quickly, then users won't learn that search doesn't work well when they first try it.
Buy this book, *Search Analytics*: http://www.rosenfeldmedia.com/books/searchanalytics/
Look at this problem impact calculator:
http://www.measuringusability.com/products/problemImpact

If you have a lot of volunteers familiar with your knowledge base, this might be a good project to crowdsource, if you don't have anyone fulltime doing content strategy, analytics, or SEO yet. It can be as simple as this:

1. perform a site search on a top query from the site search
2. add up the quality of your first page of results by scoring each result 0, 1 or 2
3. suggest best bets from SUMO and mozilla.org to be pushed to the top for that query
4. prioritize your worst results for content improvement

Recommendation: Push the best bets to the top of SRPs (search results pages) manually,

even if they are not in the search results. For example, if I search for “add-ons” push https://addons.mozilla.org/en-US/firefox/ and https://addons.mozilla.org/en-US/firefox/faq to the top, along with SUMO’s best bets for that topic.

Recommendation: What is “home”? You can really have only one. Think about Mozilla, Firefox, SUMO, Thunderbird, Mobile, and other website informational relationships, and put some organization-wide links in the navigation on all three sites. Pulling them together into one website would be best. Support should sit next to or just inside of Products in the organization’s IA. It’s typical to see them side by side in the navigation, because many companies have both products and services, and the support or customer service orgs service both.

Recommendation: Translation and manual switching to localized sites should be handled at the ubiquitous nav level of each site, and this should be offered prominently at the top of the SUMO home page. No matter how well your detection works, you will still have Switzerland, people traveling, bilingual readers, and people using other people’s computers.

For left-to-right language sites, the usual location for language and other first-needed utilities is top right, above the page navigation and other page content. Other utility links that people often need right away on a home page are things like the accessible “skip” navigation link, a link to any mobile site, and contact with the organization. Login/logout is usually in that area too.



Recommendations:
The most important function of a translation tool is to get you to notice that it’s a translation tool.
Language choices are best presented in the language and character set for each choice.

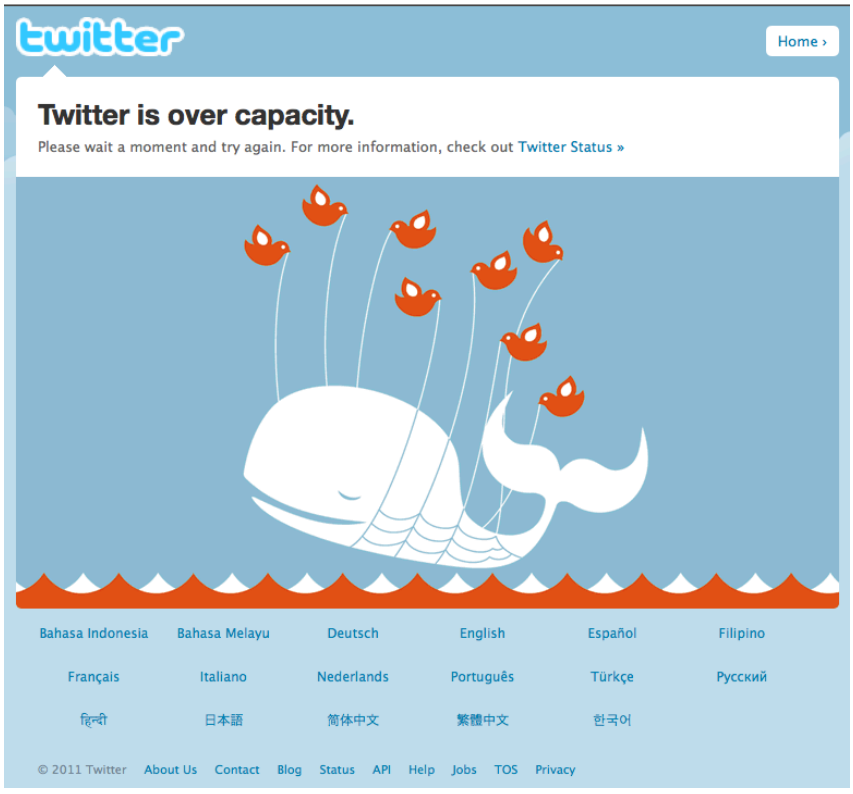
If you have a handful of languages show them all. If you have 80, you'll need a short list visible and a link with a world globe icon to get to the language landing page. No flag icons.

The best practice when you have too many languages to show all their names on the page is to show at least one of several visible languages in a foreign character set, so people who can't read the English will be drawn to the selector.

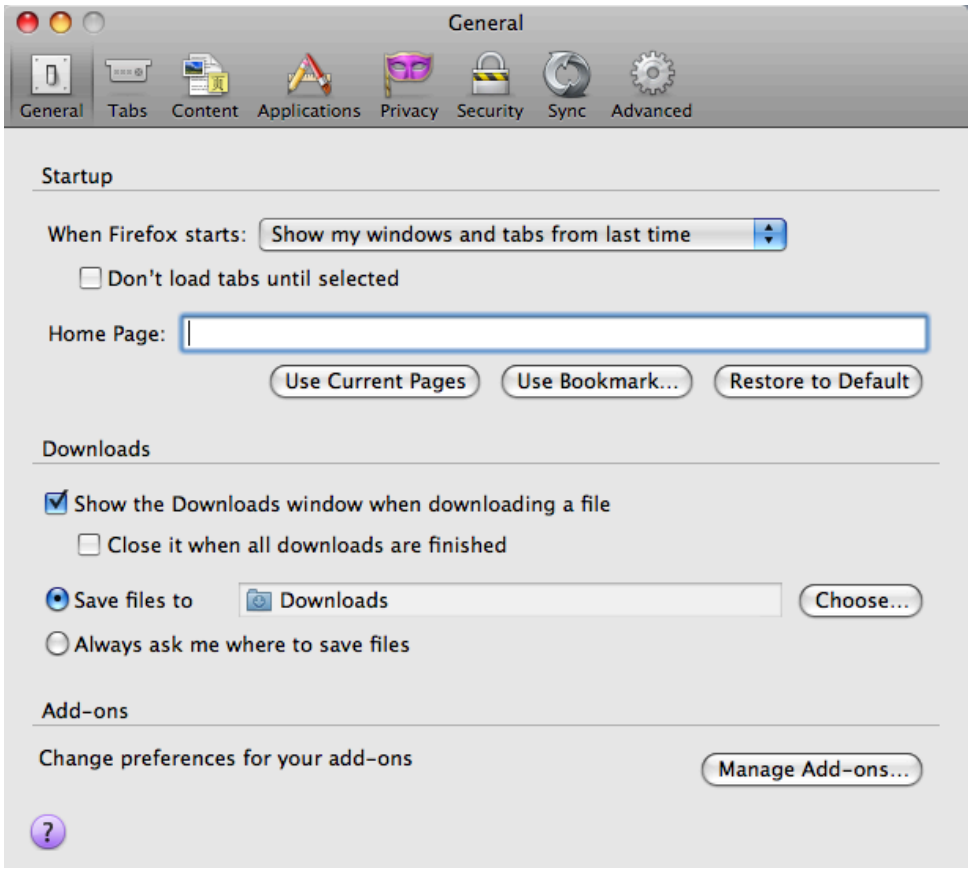
Google gets this wrong with their translate widget, which displays the name of the language shown, which (although an accurate reporting of the system state) is much less useful in signalling the tool's function than a language name in any other character set would be. And of course, if you can read English you don't need to be told you are reading English, and if you can't read English, you might not be able to understand the label "English" either.
PayPal has a menu, but it's not attractive unless you know what "English" is.

It is standard practice now to put this sort of utility top right in L2R languages or else march the languages across the top or bottom of the page, as text-based links for SEO and accessibility.

See http://Amazon.co.jp for another mediocre example. They have a simple English/Japanese toggle, which is very easy to spot. Unfortunately in the footer, it's pretty hard to find United States, Spain, France, and Italy, so they blew it there. China is more obvious though.



Twitter wisely presents its localized sites whenever its main site is overwhelmed, in much the same way. This is also a good thing to do on search results pages with no results, and when foreign characters are detected for English-only sites, and so on.



Problems: Currently these page options are confusing and they unintentionally make people choose between two things that should be available at the same time: either to restore tabs *or* to have an empty new window (via the dropdown choices). Starting with an empty window on application launch is different than opening new, empty windows. Currently the latter is not well supported. You must type “about:blank” in the field if you want an empty new window to be your window default, and it’s difficult to find out how to do that. Currently, the default start page acts like a disappearing form field hint (wrong metaphor), and hints cause many web usability difficulties (and so should not be used anyway). Now, you can insert the cursor, making the page seem to disappear, but it comes back when you exit the field, which doesn’t work alike with other similar-looking form fields.

Recommendation: Make it easier to open new, empty windows AND have your tabs restored on startup, by showing the start page in the text field, and changing the start page to an empty window when the user deletes that entry. Even the Firefox start page should be normal text in the field. Consider adding a button for “Use Empty Page” in the button row below the field as well. “Restore to Default” is also unclear because it doesn’t say what it actually does. If it restores the Firefox start page, it should say “Use Firefox start page”, and pressing it should make text appear in the blank to that effect.

Rationale: Changing the home page is a top task for support visitors, and this confusing set of

controls and options is one of the reasons why. Currently, with the default configuration (Firefox start page), opening a browser window and immediately pasting a URL into the location bar is too difficult to do and requires a mouse, which is both an accessibility and a productivity issue. The options for starting with a empty window (which facilitates that interaction pattern) are confusing and difficult to change in Firefox, compared to other browsers. The default home page entry does not act in expected ways (it acts like a form field hint instead, a famously bad interaction type), and the very desirable choice (open new empty window) is not supported in the interface, but requires technical assistance to achieve. This difficulty thus pushes people to choose to open Firefox with a empty window OR open Firefox with last session's tabs. Instead there should be two kinds of open-blank choice, one at the application launch level (dropdown) and one at the new window level (the field and/or buttons below).

Recommendation: SRPs with no results should also offer the search tool, search tips (check spelling, use fewer or different words), and site navigation, at a minimum. Helpful links are also a great idea, for example the top destination pages or topical landing pages in the KB.

Recommendation: Add some task-based navigation to the home page for some top tasks. It's more effective to have users sort themselves out on the home page by what they want to do (tasks) rather than by what the website has or who the visitors are. For example: File bugs and provide help, look for technical information vs. find out how to do do things, get downloads and updates, customize preferences and settings and get or troubleshoot add-ons. The smaller the number of discrete tasks on the home page, the faster the user can go down a path where the necessary complexity of the information space will be relevant.

Recommendation: When the complexity warrants it, a summary description, an oldstyle Yahoo! directory list of subtopics, or an outline-style nested list would be helpful to expose items in the topic without requiring people to click to see what something is. When I use the term "landing page," that's what I'm talking about. Landing pages help with SEO and they also add necessary decision support for the user.

Recommendation: Effectively grouped and labeled page items are extremely important to avoid overwhelming the visitor. Pages full of text or links can push people away from the page. Use chunking to help aim visitors at the content they need.

Recommendation: Keyboard and mouse shortcuts should be linked cheatsheets that are optimized for PDFing and/or also offered as pretty PDF downloads.

Recommendation: Treat customization/settings/prefs/add-on management as different flavors of the same thing. Most casual software users won't be able to make fine technical distinctions among the many things that they can change to tweak their experience. Only developers know the difference (if any) among plugins and add-ons and extensions. We can't expect users to differentiate between stuff they can change and other stuff they can change, based on where it's located in the UI.

Search tuning bug: A “favourites” search does not also find “favorites” apparently. It’s easy to suspect that’s the tip of an iceberg. There should be a synonym relationship between British and English spellings of the same words.

Missing content? A query for “language” is not very helpful but 10,000+ people do it every month. Facets would help disambiguate the term, but it would be great if the results helped people switch languages also. Similarly “translate” should give very helpful search results, not only for translating the page or switching to a different locale of the website, but also for those wanting to donate their translation skills for support documentation.

Recommendation: Form field labels in the field (and hints) are bad news. They should be actively discouraged. We see a lot of those submitted unchanged in the search logs, which might mean that there are munged queries below that where people typed into them as well. It’s best practice to not do in-field labels: http://www.uxmatters.com/mt/archives/2010/03/dont-put-hints-inside-text-boxes-in-web-forms.php

"How to" is not useful enough to be a topic type, even though users are looking for “how to X” in search a lot. Major subtopics have to do with setting controls, making backups, and likely screenshots. “How to” is a potential kitchen-drawer problem (a place that fills up with things that don’t have much to do with each other) if not constrained somehow, so maybe articles should use “How to” for SEO whenever appropriate, and these subtopics could be handled differently. *How to set controls* issues are clearly part of customization, and both screen shots and backups are important enough to warrant their own links in a prominent place.

Screen shot / screen capture / printscreen queries are probably people looking for add-ons to do screenshots; but it could also be people looking for product UI screenshots, which are likely not tagged as such, although the word "screenshot" might be in some captions. Search should return both tools and SUMO kb screenshots. Promote a content strategy that includes this kind of microcontent labeling to facilitate retrieval with search. (ALT="screen shot of Options: Advanced panel")

Recommendation: Promoting screenshots and short video in documentation would be wise.

Issue: “Troubleshooting” is not found in the top 1000 query terms. That doesn’t mean no one knows what it is, but it does have some implications for finding articles that use that term or classification.

Issue: Searchers don’t search for solutions most of the time, they search for problems. So for a fictional example, an article called “Troubleshooting Firefox Performance Issues” might not be found when users search for “Firefox slow”, “Firefox stopped responding” and “Flash is crashing” unless problem statements like these also appear in the article.

Recommendation: For link text and navigation labels, use the article and thread titles (or part of them) when they are good enough to signal what they contain.

Email - It's not clear which of these queries for "email" might be about which needs. A sequential look at the user session in search might clear that up. Likely suspects are webmail problems, Thunderbird questions, contacting SUMO questions and emailing pages questions. Another good investigative route would be to look at the search logs for queries that have "email" in them and see what any other modifying words are.

Security and privacy: 74,550 queries in the top 304 search terms over 3 months. It's a red hot topic cluster. It might be time to move privacy/security controls to the visible part of the browser. A privacy bar? A big red erase everything button? **Peoples lives, freedom, jobs, marriages, and children's safety all depend on getting this information clearing function right.** The controls seem scattered now, so it's difficult for people to be sure they got all the right stuff deleted. Password controls seem particularly difficult to find.

cookies: 31,036 queries in the top 304 search terms over 3 months - a surprising amount, until you realize how closely related cookies are to security and privacy.

Open issue: What should be done about the queries of the people searching SUMO when they intend to do a websearch? (facebook, sex, etc.)

Other sites - This group is ambiguous and also the largest cluster - **75,414** queries in the top 304 search terms over 3 months.

Recommendation: We need to know more about why people search for other sites and other sites' URLs. Intercept recommended, e.g. page that asks what they want and shows a link to the best guess we have, such as the Facebook login page. There are also very important needs such as: website.com does not work with Firefox; and why can't I reach website.com? (security and privacy topics, sometimes of life and death importance).

Recommendation: The question of whether or not the wrong-place searches (users not understanding search scope, browser search controls vs website search) are a Firefox usability problem, a SUMO usability problem, or a teaching moment for the users should be debated in Mozilla UX.

Developers tend to be too critical of users in this regard, because experts would never make this mistake, so it's hard to empathize with naive users at this remove on the learning curve. For users who care more about Facebooking than how their computer works (sadly, this describes most of humanity with electricity) the expectation is that it's easier to just try things than it is to RTFM. If it works, it's like magic, and if it doesn't work, it must be broken.

Recommendation: We can't fix the users, ultimately, we can only change the design. So give them scaffolding (tutorials, JIT help, examples, screen movies of interactions, etc.) but try to alter the behavior primarily by altering the designs and messaging. Remember a lot of your users read limited or no English, and that some might be 10 years old, others have reading impairments or limited vocabularies.

http://www.fhwa.dot.gov/hep/lowlim/index.htm
How to engage low-literacy and limited-English-proficiency populations

http://www.plainlanguage.gov/howto/guidelines/FederalPLGuidelines/TOC.cfm
Federal Plain Language Guidelines

Recommendation: Provide a glossary. A common complaint is that people can't follow computer-related instructions because they don't know what the terms mean. SUMO writers have done a great job with plain language, but there are still some terms that people have to learn.

"**Games**" searches (3112) are also grouped into this bucket. These are also likely split into wrong-place searches and tech support questions about web-based (Flash) games.

"**Sex**" search queries (4784 of the other-site group) are more wrong-place searches (likely mistaking the scope of the search for the whole web and/or using search as if it were the Awesome Bar). It's tempting to use humor to deflect these, but it would be hard to get the tone right (perhaps: I'm sorry, Dave, I can't do that). Ideas: When the search engine can detect that users intend to search the web, it could give them a "search the web" button on the results page. (You might want to include that option on the 0 results page regardless.) Alternatively, the site search could pass this kind of search through to Google.

Further research: On some mobile devices it is easier to search than to start a browser session from the URL field. Perhaps this has some effect on what users are doing on the home page. Someone could look to see if any of this search-for-URL behavior has a user-agent string that may clue us to particular platform(s) or browser(s), in the search logs.

Source: Thunderbird team

Thunderbird top tasks From Roland Tanglao <rtanglao@mozilla.com>

1. Download / install Thunderbird and the Thunderbird support home page
https://support.mozillamessaging.com/

2. Installing and using Lightning, the Calendar Add-on for Thunderbird
https://support.mozillamessaging.com/en-US/kb/lightning-articles

3. How to backup Thunderbird Data including your email and your contacts
https://support.mozillamessaging.com/en-US/kb/profiles?s=profile+backup&as=s#w_backing-up-a-profile

4. How to Transfer Thunderbird to a new computer
http://support.mozillamessaging.com/en-US/kb/Moving-Thunderbird-Data-to-a-New-Computer

5. How to create an account, send and receive emails
https://support.mozillamessaging.com/en-US/kb/Sending-and-Receiving-Emails

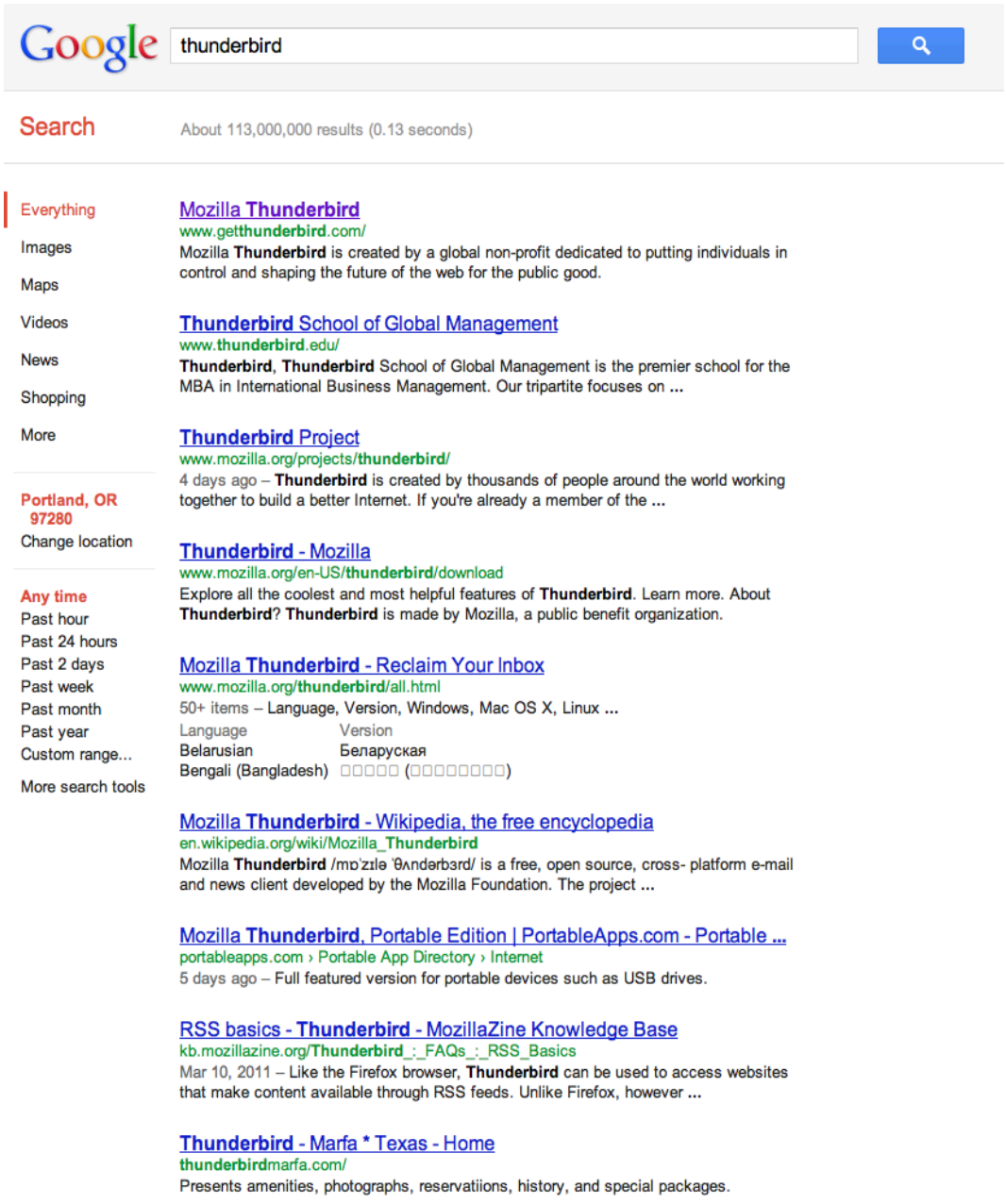
6. Keyboard Shortcuts
https://support.mozillamessaging.com/en-US/kb/keyboard-shortcuts

7. Thunderbird and Gmail
https://support.mozillamessaging.com/en-US/kb/thunderbird-and-gmail

Source: Looking at some Thunderbird pages

Issue: Only one of the many Thunderbird pages I looked at (https://www.mozilla.org/en-US/thunderbird/all.html) says what Thunderbird is or why you would want it. (See image below, also.)

Recommendation: It would be very helpful for both SEO and new visitors (who may enter the Mozilla webspace anywhere), to put "email" and "Mozilla" into all the Thunderbird page titles, and perhaps a short description or a tagline in the content area near the logo.



Read the descriptions in the image above relevant to Mozilla. Mozilla dominates this page, having 7 out of the first 10 search results on Google (#10, not shown, is U.S.A.F. Thunderbirds | America's Ambassadors in Blue). Wikipedia's description of Thunderbird is the best. Mozilla's descriptions, as interesting, varied and compelling as they are, unfortunately don't tell you what Thunderbird is.

In the following rewrite, notice how the first sentence carries a lot of information and keywords:

Thunderbird, the free, open source, cross-platform email and news app, is made by

Mozilla. Mozilla is a non-profit foundation with a global community of contributors dedicated to putting individuals in control and shaping the future of the web for the public good.

A title example: Instead of “Thunderbird Support | Thunderbird” for Thunderbird support front page title, you could have some more keywords working for you. These HTML titles (window titles) show up as link text on search engines and other pages, so you can really use them to help people understand what they will get when they click. Titles should be unique for the same reasons. **In a list of no-context bookmarks or a list of very similar links, the title has to signal correctly what the page contains.** These examples show how keywords can tell the story:

> Thunderbird Help | Mozilla email support home
> Mozilla email support | Thunderbird Help
> Thunderbird email by Mozilla | Help

A title like “Keyboard Shortcuts | How to | Thunderbird” is already pretty good, but “Keyboard shortcuts for Thunderbird email” would be better, and “Keyboard shortcuts for Thunderbird email | Mozilla Support” gives you two more great keywords.

Optimizing Meta-descriptions and Title tags

This advice applies globally, but I’ll use Thunderbird as an example.

Why you care: Beefing up your metadata and microcontent can buy a lot of search engine relevancy ranking, making your content easier to find. The same editing effort also helps people make better decisions about which links to click, making their work more efficient.

www.getthunderbird.com has a great Search Results Page (SRP) blurb (meta-description) as far as it goes: “**Mozilla Thunderbird is created by a global non-profit dedicated to putting individuals in control and shaping the future of the web for the public good.**” (I definitely love you now, but what is it?) The visible page content also has a good summary, although it’s a bit exclamationy, which can turn some people off: “**Thunderbird is a free email application that's easy to set up and customize - and it's loaded with great features!**“

Merge these two ideas into a concise summary and meta-description and use it across the Thunderbird pages. “**Mozilla Thunderbird, a free email application for everyone”** for example. “**Thunderbird, the free email app from Mozilla - for the world**”.
“**Thunderbird - a free, full-featured email and RSS app built by Mozilla for the world.**” For brevity “app” would be better, and it might have better recognition now than “application” ever enjoyed among non-technologists.

Tip: **Lockstep consistency in title conventions will yield many annoying and redundant results,** some of which will exceed reasonable length, (if not the 64-character recommended max in the spec). Instead, be flexible and use several approaches to title wording tactics, while focusing strategically on decision support, descriptions and keywords for search optimization.

Training: Nielsen Norman Group offers 1-2 day training workshops in content usability, information architecture, usability testing, paper prototyping, and white-hat, practical SEO among other things. We offer them on 3 continents at our conferences, where you can choose from a variety of workshops and tutorials and pay for only the ones you wish to attend. This short, intensive course format is a very practical and cost effective way for you to train your own people to create more usable content. (Naturally similar courses are available from other sources, but these are the ones I know something about.)

Source: Top (100) en-US pages

https://docs.google.com/spreadsheet/ccc?key=0AgscVQdNHuGudFNKUnZUZ3NaWGZGdnpLLWdzVnpNYVE&hl=en_US#gid=0

Things that stand out in the data:

- #3 is 1,137,761 visits for **WMP plugin!** That argues for some prominence, if not a bundle. MacOS uses Flip4Mac for that, so people who search for WMP plugin often need that instead.
- #4 is **plugin crash reports**

- #5 is **how to set home page**, which is reportedly at least partly due to a recent malware attack that changes the home page. Watch that fall in the count over time, if so.

- #7 is **private browsing**, the #1 privacy/security issue

- #9 is mobile

- #10 is **How do I customize toolbars** Search data indicates that removing toolbars is a hot topic, but this might be another recent hot topic because of Google toolbar.

- #11 is **Clear recent history,** and #14 is **clearing cache**, making data clearing the #2 privacy/security issue

- #17 is **Firefox Home help**

- #77 is **Will it install on my mobile device**? This page is the #1 Mobile topic

  Recommendation: Require meta-descriptions, for search engine optimization (SEO). A good meta-description starts off with keywords important to the user, because users skim the first 2-3 words of each line when scanning through a search results page (SRP).

  See the word frequency data section for more recommendations on writing microcontent.

- SUMO is like a fish trap. It's easy to get into but hard to get out of. The main navigation at Mozilla could be used here to good effect, even if it's relegated to the footer.

- Now, in the SUMO footer, is a logo that says "Mozilla Firefox" but it goes to Mozilla Home instead. Maybe it should go here: http://www.mozilla.org/en-US/firefox/new/ , but notice how this page doesn't integrate with SUMO or Mozilla.org very well in terms of navigation.

- Although Mozilla might think of Support as a project, users won't. Although Mozilla thinks of Firefox as Mozilla, most users won't.

- Support is not prominent on the Mozilla home page, and that nav is not like the others.

- Pages like https://addons.mozilla.org/en-US/firefox/faq should be findable in SUMO search. It should also be linked from any add-ons landing page.

- **Recommendation:** "Firefox" is missing from a lot of URLs, which probably hurts SEO. Changing the URLs might be a hassle, because they would also need to be redirected. It might be wise to make a new guideline to add the product to the URL path or filename, and/or it could be added to the meta-description and the page title and main heading.

Recommendation: Creation and last-modified dates would be really great because it would help characterize the currency of the article and allow people to judge its relevance. Even though you might ensure that only the latest, still-relevant content is available, the casual KB user can't know that.

Further research needed

Sometimes top pages are simply the easiest to find, but we hope lots of these are most-wanted instead. The good news is that many of the SUMO pages have excellent titles and headings that make them easy to find, but OTOH, they might be the easiest to find pages because of superior SEO.

Recommendation: From time to time, analyze your most busy pages against their ratings so

you can find easy-to-find but low-quality pages and raise the SEO of the better pages that are being bypassed.

A big concern is whether the people searching are finding the pages they need. We don't know. This gap must be tested and closed.

Another on-point article:
http://www.neoinsight.com/newsletter/1112.html
Task-based web analytics

It would be nice to know, as the article explains, not just quantity, but quality. We can't address task quality measuring in this project, but it's a data need for for the website. How good is the page for the person who finds it, in terms of giving them what they need to succeed at their task?

Another way to find out more (besides looking at ratings for top trafficked pages and re-doing top queries), would be to look at the logs (search and regular web logs) to find sequential pages that an IP address visits during search or browse activities, to see if there are patterns in the data that suggest good or winding paths.

I looked at these top 100 pages and categorized them. They all seem reasonable in terms of being something someone actually looked for, needed, and got. There's a strong correspondence between the the top destinations and the types of information looked for in the site search queries. This good correspondence means the buckets from search are probably sufficient for all the most-frequent and most-important tasks.

Top tasks, according to the data

Top tasks from top pages	Top tasks from top search terms
WMP plugin (get? how to?)	Facebook, sex, webmail URLs, game sites
Plugin crash report (which of mine are most likely?)	Bookmarks (export, import)
How to set the home page	Download updates
Update Firefox	How to set the home page
Private browsing (how to/what is it)	Change the language of the site
Ask a question	Enable/delete cookies
Mobile (is there one? where can I get it)	Get add-ons (How to make screen shots, e.g.)
How to customize toolbars	Ask a technical question/Investigate an error message
How to clear recent history	How to clear history, cache, temporary files
Log in	How to manage tabs
How to clear cache	How to increase font size
Go to the forum and do something (ask a question/answer a question)	Private browsing
Add-ons (find out, get)	How to (start/stop) password autofill
Firefox Home app (is there an iPhone app/what is Firefox Home app? get it)	Change default preferences/options/search engine
Flash is crashing	use controls (e.g.: How to block pop-ups)
Popup blocker	Remove toolbars / add themes

Many most-found pages and most-looked-for information correspond.

The table below takes this same information and looks at the unmatched items in both columns. Besides the items found on both lists (black), the red topics are also most-wanted info. The red topics may be relatively easy to find (perhaps via web search), as they are not on the top 15 list for site search. The red numbers are the *totals* from the top 1000 site search queries that likely apply to this same topic. The purple topics are most-wanted also, and these might be harder to find (or missing), because they are not also on the high-traffic short list. **Purple topics are especially good candidates for testing.** Purple numbers indicate the *rank* of the first mention on the top pages list.

Conclusions: **We can draw our testing tasks from the search term column. These tasks can be further rolled up into types of activities for a task-based UI on the home page.**

Further research needed: Match top pages and top search issues on a monthly or every two-month cycle at a minimum, so you can see your information needs as they change. Doing that will help you respond early in the need curve for transient urgent topics, and it will also help you identify the top tasks that don't change much, so you can further optimize paths through your website for them.

Top tasks from top PAGES	Top tasks from top SEARCH terms
WMP plugin (393 queries in the top 1000 search terms)	Other sites - Wrong place (using site search as AB) (most) - Technical help for particular websites (some)
Plugin crash report (1837 queries in top 1000 terms)	**Bookmarks (#26)** (export, import)
How to set the home page	Download updates
Update Firefox	How to set the home page
Private browsing	“Language” (language feature like Chrome’s and in some cases, change the language of the site)
Ask a question	**Enable/delete cookies (#23)**
Mobile (sync/Fxhome/Android) (http://support.mozilla.com/en-US/mobile) (What people want most, according to search, is mobile sync.)	Get add-ons
How to customize toolbars	Ask a technical question/Investigate an error message
How to clear recent history	How to clear history, cache, temporary files
Log in	**How to manage tabs (#40 groups, #45 restore, #53 app)**
How to clear cache	**How to increase font size** (Not in the top-100 pages - very hard to find)
Go to the forum	Private browsing
Add-ons (find out, get)	**How to (start/stop) password autofill (#71 / #101)**
Firefox Home app (Firefox Home app is not present in the top 1000 search terms; neither is “iphone” or “apple”.)	**Change default preferences/options/search engine (#93)**
Flash is crashing (In 3 mo. there were >5000 searches for Flash, but in top 1000 queries, “flash” was not coupled with “crash”.)	How to use controls (e.g.: How to block pop-ups)

Popup blocker	Remove toolbars / add themes

Accessibility

Font-size info is most-wanted by searchers and it is currently inaccessible via browsing. The best place to put the font-size KB article is with the customization documentation and in a new Accessibility area.

Recommendation: All the issues identified with accessibility from the data analyzed seem font-size/readability related. Let's fix the font size issues! **People must be able to read web pages.** Browser controls for font size have in recent years disappeared from the surface of most browsers' toolbars, causing problems for users who don't look in the menus or who can't understand technical jargon and conventions. **Bringing visible controls for zoom back would be a big usability improvement.**

- Look at these queries by platform to see what's going on.
- Educate content creators of all kinds about defaults (browsers and authors), CSS best practices for creating relative (vs fixed) font sizes, and the ranges of zoom that visually impaired people need.
- High-resolution screens on netbooks have complicated the problem and increased the need for users to change defaults.

Accessibility addresses many common needs:

- Reading difficulties, ESL / low literacy: need predictability, low reading level, font-size controls, good contrast, focused layout, color blindness-aware palette, pictures, in-context explanations and actions, use core vocabulary
- Low/no vision: means linear access and keyboards NOT random access and mice; use video and audible descriptions, provide text transcripts, avoid popups
- Low / no audio: provide text transcripts
- Technical: require device/platform independence, web standards, avoid hover for anything important

Caution: Remember what happened when Microsoft made Explorer's default font larger. Suddenly using IE (which dominated the browser market share at the time) made most of the websites look broken with annoyingly large font sizes. So authors forced font size to appear smaller by default on their websites (-1, -2 and fixed sizes), and then all the websites optimized

for IE looked broken with annoyingly small font sizes that were very hard to read in non-IE browsers.

Lessons learned, now best practice for accessibility: Give the users the controls. Specify only the relative sizes of fonts. Try to keep browser default size the same across browsers.

http://yaccessibilityblog.com/library/easy-fixes-to-common-accessibility-problems.html
Easy Fixes to Common Accessibility Problems

Suggestion: The open source NVDA screen reader, for example, could be a helpful topic to explore in new content and it might provide or become a good partner for Mozilla.
http://www.nvda-project.org/
http://www.nvda-project.org/wiki/About (system requirements info)

Chrome already has http://www.chromevox.com/

Source: Pain Points

https://support.mozilla.org/en-US/forums/contributors/708028?last=44101

the-edmeister:

1. Moderators don't have a "label" to go with their username & avatar
2. I think the "Solved It" button in the email that is sent to the "owner" when the first response is made in a thread, is being misused - too many threads are marked as solved when the only answer in the thread appears to be incorrect to me and the "owner" hasn't posted any response in that thread.
3. Clicking to the "next" page doesn't hold my place in the order of the threads, I see threads that were on the previous page.

Forum - tech support top tasks

Much of the annoyance with task flow for contributors in the forum seems to be in problems with the forum app interaction design.

An annoying IA problem came up during SME interviews: **It takes too long to answer FAQs in the forum, largely because there is no self-serve, topical landing page with summary blurbs on it for (m)any of the KB articles that questioners need. This lack is driving away**

new contributors.

The new IA will have more landing pages for topics and subtopics. The explanations can be pulled from the article database summaries and put on the landing pages. These will also serve as blurbs on SRPs if they are in the meta-description in the HTML.

Answering questions

Recommendation: **Help Center Pain Points.PDF** document illustrates problems in learning to contribute, some of which are navigation related. **Elena Moon correctly pointed out in slide 10 of her expert review that these tools (edit article, translate article, show history) should not be exposed to a non-logged-in user.**

Recommendation: The problems illustrated deserve focused attention and their own project because the content, workflow, and processes need to be worked on in terms of interaction design and instructional design. The companion document, **Help Forum Pain Points.PDF** is part of this issue as well, and it should be reviewed and attacked as another end of the same problem.
https://docs.google.com/open?id=0BwscVQdNHuGuMENwU3FiTERUTjZKczJIZmN4aUZpZw
Help Forum Pain Points.PDF
https://docs.google.com/open?id=0BwscVQdNHuGuanBJRzBBeTVTRzZlWTdPLWliZFZmUQ
Help Center Pain Points.PDF

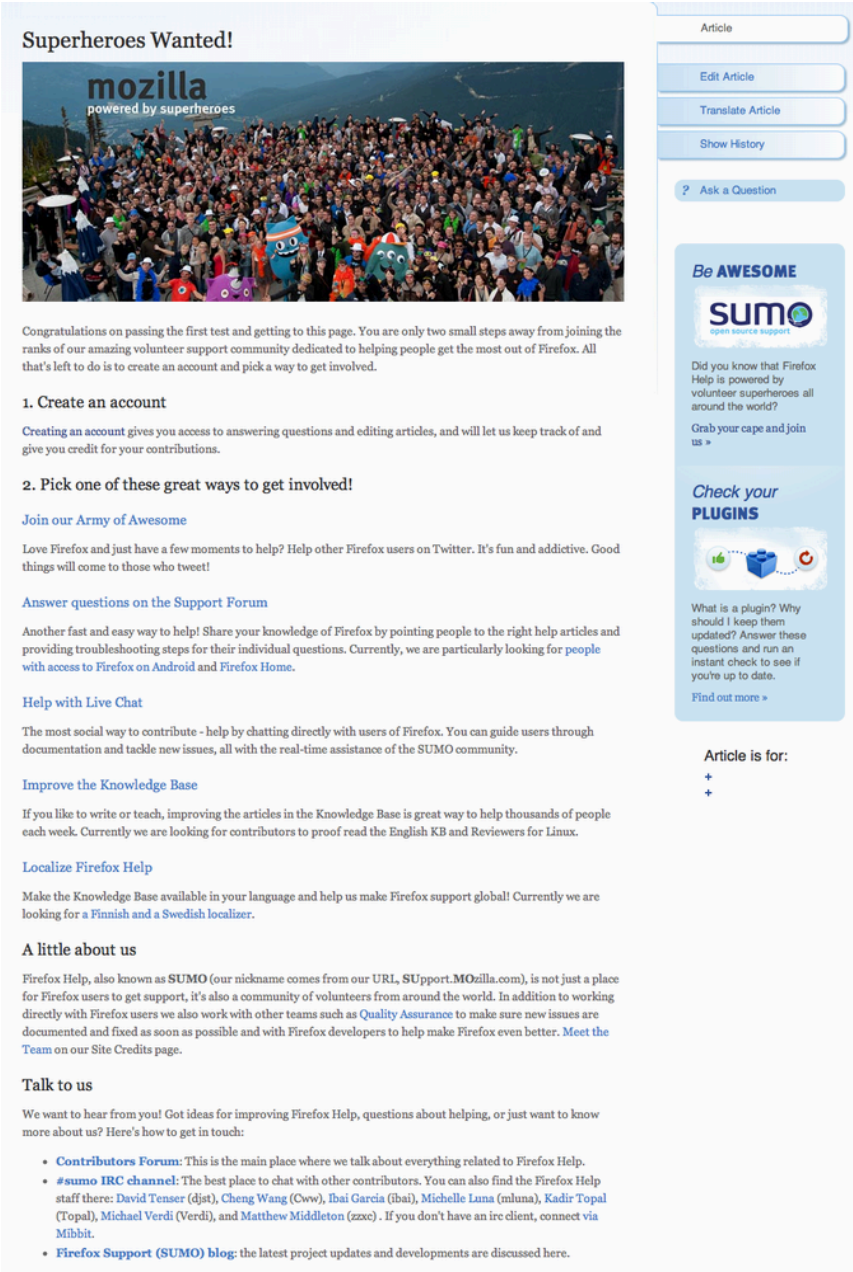
Superheroes Wanted

Getting new contributors is a very important task to optimize. It must be easy to find, easy to do, easy to understand, and easy to stay in the task.

- The current page is a list of activities rather than an activity flow. Get people to pick an activity they are excited about, then ask them to create a login to get started on the landing page for that activity.

- The summary at the top isn't doing a good job in SRP blurbs of describing its content.

- The copy isn't sufficiently motivating. It needs to answer "why" and "who" questions about contributing.



Recommendation: On https://support.mozilla.org/en-US/kb/superheroes-wanted consider listing the activities at the top of the page so that people can see the range of possibility immediately. Consider linking to your open paid positions here as well, and get a link back here from that page too.

(The idea is not to omit the text now on the page shown above, but to improve it. The blurbs have been omitted below to keep their content from distracting from the advice given for the section names, which need improvement. Blurbs may need editing, however.)

Why your contribution is important to the world.

(New content needed about who can help and why it's important to help Firefox users.)

A little about us

Add other helpful links (or create equivalent material), such as:
http://www.mozilla.org/about/mission.html
http://www.mozilla.org/contribute/
https://donate.mozilla.org/page/contribute/join-mozilla

Pick one of these great ways to get involved!

"Join our Army of Awesome" Twitter troops

("Twitter" gives this link text/page title some meaning when it's encountered out of context.)

Answer questions in the Support Forum

~~Help with Live Chat~~

(It's gone, right?)

Improve the Knowledge Base

Translate Firefox Help

Recommendation: Use the words: "translate," "translation," "international," "global", "worldwide" and "world" on this page and others that deal with localization efforts, localized sites, and language-version anything. Many people who need to find this entry point for support will not be searching for "localize" and "localization" or "l10n". Of course those terms must work to find this info as well, so varying the terms in the content will help make this a top search result for that topic.

Join the conversation

Note: more vertical white space really helps here. Additions in red:

- **Contributors Forum**: This is the main place where we talk about everything related to Firefox Help.

- **#sumo IRC channel**: The best place to chat with other contributors. You can also find

the Firefox Help staff there: David Tenser (djst), Cheng Wang (Cww), Ibai Garcia (ibai), Michelle Luna (mluna), Kadir Topal (Topal), Michael Verdi (Verdi), and Matthew Middleton (zzxc) . If you don't have an IRC client, connect via Mibbit.

- **Firefox Support (SUMO) blog**: the latest project updates and developments are discussed here.

- **Subscribe to our contributor newsletter**:
  Sample issue
  [Add signup form from: http://www.mozilla.org/en-US/newsletter/about_mozilla/]

Create an account

(See the recommendations about the existing registration form, below. It's fine to keep create an account on this page, but also make sure the potential contributors can also get to it on the landing page for each activity, above.) People register as a means to an end, but they don't want to do it, so first get them excited about why, who and what, then confront them with the form. Even the word "registration" is unpleasant.

This content is also aimed toward the same goals and could be incorporated here.
http://www.mozilla.org/contribute/areas.html
http://www.mozilla.org/contribute/timeavailable.html
http://www.mozilla.org/contribute/local/

Source: Kitsune/KB/Audit

The following advice was given in the audit, and it's worth quoting here:

- Revamp the contributor documentation - It should tell a story - who we are, why we're passionate about what we do. It would be great if it did that with a video. In addition it needs some specific and visually identified steps that a new contributor should do to get started - Watch this video > register > talk to these people > learn how to make your first contribution.
  - Make it friendly - tone should = rainbow dolphins
  - Make it clear - don't make me think!
  - Use video - make it personal
- Mozilla main navigation - Make Community > Support link to the How to contribute page.
- The support community link from Mozilla.org just takes you to the forums - it should also link to the How to contribute page.



Recommendation: Provide more explanation around registration and answer questions people may have while doing it. This page wastes a great opportunity to convince people that registration is worth the hassle. What are you registering for? What do you get to do? What can you expect? How will your email address be used? What are secure password suggestions and requirements? Will your username be displayed publicly? Are spaces allowed in it? Is this your once-in-a-lifetime chance to select it? What happens if you can't use this page for some reason, can you still register some other way? Who should you contact?

Source: KB word frequency list 2012

https://docs.google.com/spreadsheet/ccc?key=0AmCjyDM0fEFgdG14cG9DVEFDTjR5RVlhMjJEdDVNZXc&hl=en_US#gid=0

The word count from the KB shows lots of great common terms that mean what you think they mean. The likely exceptions are now in bold.

Recommendation: Ask contributors tag the KB articles after we have a revised tag list, and ask them to nominate new tags if they see a gap. For example, you could provide an "other" tag with a type-in comment for example, and then have an editor classify those "other" items into new prescribed tags as needed. This could be done as a card sort in parallel with the Treejack test of the proposed new IA.

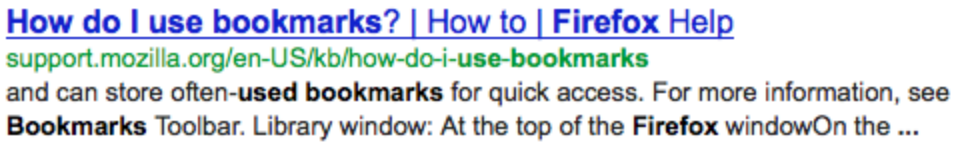
Recommendations: Have a technical editor improve the summary of each KB article. The summary could also be used as the search results description (meta description tag in HTML).

In order to be most effective, summaries must start with the important keywords, because the display length is variable. That same microcontent could be reused in verbose content lists for browsing on SUMO.

The edited summary should be informed by the questions, **“what would I be looking for when this is what I need to find?”** and **“what is this page about, in essence, in layman’s terms?”** Use synonyms in summaries rather than condensing them from words in the content below. Verb variation matters a lot in terms of making your article findable.

Keywords and phrases generated from these questions should form the basis for the summary for best SEO.

Because the page title and main heading are already doing a lot of the SEO heavy lifting, and one of them will always be present when the description is shown, the summary/description need not be very redundant with the title. It should instead add meaningful additional metadata that helps users either choose or ignore the article with confidence.

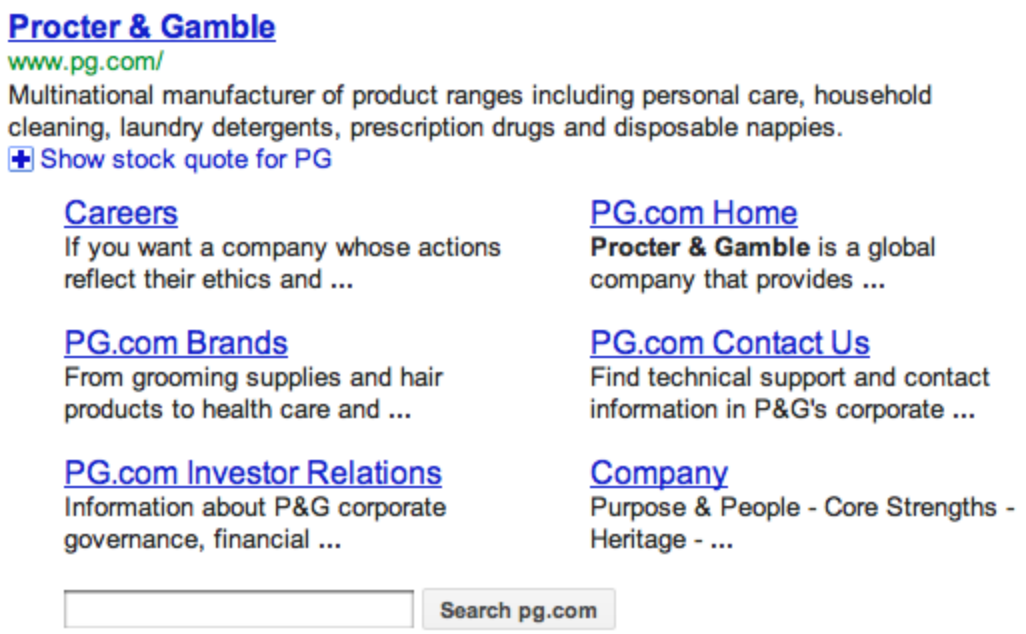


This is what the problem looks like that the meta-description/summary effort would fix. Only by making meta-descriptions and leading the article with that summary can you hope to control what is displayed in SRP blurbs like this. In the absence of good metadata and summaries, Search engines show either the first words on the page or some words immediately surrounding some query terms on the page.

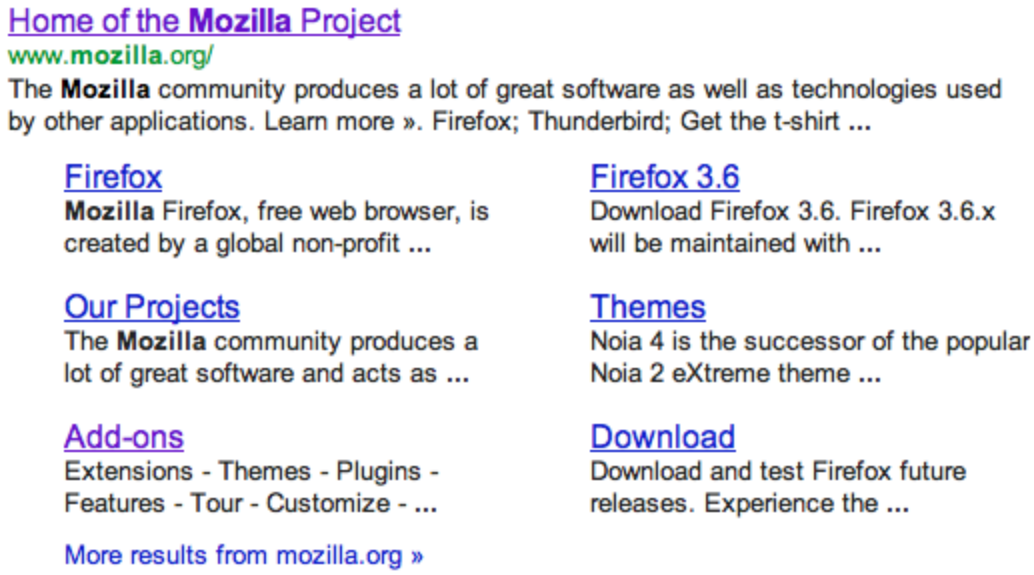
Here’s a good summary from an Amazon.com search results blurb:
Amazon CloudFront is a web service that makes it easy to distribute content with low latency via a global network of edge locations.

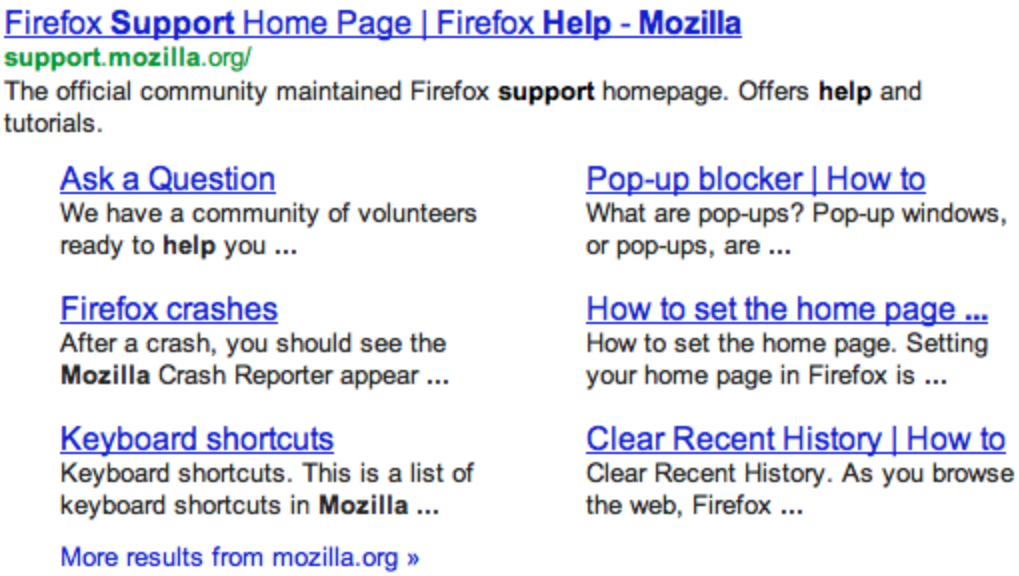
It’s technically phrased for its intended audience, and it is short, descriptive, and makes a value proposition. (SUMO needs plain language for its *occasional* user-group audience.)

Recommendation: In the redesign, make landing pages that contain information about the topic below it in the tree, then submit a Google XML “sitemap”. If you do it well and Google smiles on you, this is the kind of result you can see:



Today we can see a few problems with Mozilla sites that the new hierarchical structure and new XML site map submission will help address. The bad blurbs indicate missing meta-descriptions and/or summaries at the top of the pages:





Source: Test searches on Google for some top task wording

Terminology mismatch hurts SEO

An issue that has emerged from a few Google searches on the kind of questions users might plug into Google (based on what we can see in the search and survey data) is that there may be a lot of near misses between what users might really query for and what the KB might offer in its problem statements. A lot of that mismatch seemed to be in the verbs, not the nouns.

Recommendation: After evaluating the problem yourselves a bit more with the search engine you will be using, create search synonyms for verbs and bold words on the KB word frequency list. These synonyms could be used to tune the search engine and to pepper throughout the articles to improve SEO on web search engines.

Maybe another event like this would be a way to address these issues: https://quality.mozilla.org/2010/11/sumo-knowledge-base-test-day-success/

The new search engine might (by default) be able to disregard the most common verbs and short words, so that query success can't hinge on using "get" vs "obtain" vs "download" vs "take" vs "find" and so on.

“Firefox *get* bookmarks onto new computer” (without quotes) has awful results on Google, but “Firefox *move* bookmarks onto new computer” (without quotes) works well. So work needs to be done to fix that, in the documents themselves, at a minimum. It might be a good idea to put such phrases in the metadata and, more important, to vary the way you talk about problems and solutions on each page to cover a range of user vocabulary. Words like “select” and “delete” and other precise technical terms are not going to be first choices for people who aren’t very computer savvy.

Again, the wording in the KB articles looks pretty good now, it just needs more variation for SEO.

forums.mozillazine.org is doing better than SUMO with these natural wordings of the problem in SEO, likely because users are asking the questions directly. Unfortunately some of the advice there is obsolete and most of it is Windows-centric. This is also the case for advice on these problems on the web at large, which is a big problem for SUMO. Unless SUMO can make improvements in its SEO, users are more likely to find obsolete, bad advice on ask.com, Yahoo, and many discussion forums. In my cursory experiment I found a bunch of advice from 2002, 2005 and so on, all worse than unhelpful, because a user who finds it and wastes a bunch of time might stop looking for good advice.

Recommendation: Make SEO a priority and put some people on regular search and data analysis to make and measure improvements.

Recommendation: Archive (mark and make harder to find by the general public) and/or remove as much obsolete content at Mozilla(zine) regarding support issues as you can. You can’t afford to have your own bad content outrun your good on search results pages. Maybe Google can demote your older content also, but it would be best to hide it for every engine. If some of it must remain online, find the biggest culprits (the busiest obsolete threads) and link them to modern information manually.

Recommendation: The KB articles are great. It would be better to have more of them. If they can be authored faster in English, don’t wait for localization to make the articles available. Many people prefer English documentation for its accuracy (real or imagined), and eventually localization will get to them, especially if they are particularly useful.

Source: SME Interviews

Recommendation: Allow the forum posts to be tagged with more than one tag. This capacity will be very important to retrieval via browsing.

Recommendation: Make tagged KB articles into landing pages with blurbs, for browsing and

for ease of understanding. Tags from controlled vocabulary can populate the pages, as they do today on pages like the ones below.

Categories today: troubleshooting, howto, administration, navigation, how to contribute
https://support.mozilla.org/en-US/kb/category/10
https://support.mozilla.org/en-US/kb/category/20
https://support.mozilla.org/en-US/kb/category/30
https://support.mozilla.org/en-US/kb/category/40
https://support.mozilla.org/en-US/kb/category/50

(expanded in "Old categories" Google doc)

Open Issue: We need a way to relate some articles as a set so they can combine into one tutorial. Groupings, for example: getting started. "New to Firefox" exists today. It has a getting started article, but it's not sufficient. ⅓ **people going to the home page were clicking on "New to Firefox."**

Issue: The IA needs to put information into buckets, but there are almost always related content types that would be helpful to users who need the main information topic. It would be great if those related links were automatically pulled into the main topic pages.

Recommendation: Allow the forum posts to be in more than one bucket (by using tags that allow one to be the main topic and others to be related topics, for example). This capacity will be very important to retrieval via browsing as well as search results faceting, and it could allow for automatic population of pages for main and related topics. Redesigning the KB article classification UI will be needed to accomplish this, also. It would be very helpful to use the same sort of tagging classification scheme for other content, for articles not in the KB today, for example documentation produced by product teams and answered forum questions. Consider which metadata and workflows might be useful in automated content management and page creation, then design the CMS you need to do that with.

Finding: Will this run on my device? is the #1 Mobile FAQ.

Issue: Users in the forum who are looking for info are not finding content that exists, because it doesn't live anyplace in particular and has no IA to get to it. Therefore they ask the same questions again and again. **This leads to attrition of contributors**.

Issue: Now you can't browse to forum articles or the KB - Site needs topic landing pages.

Finding: Firefox vs Firefox Mobile are the user terms (not "desktop").

Recommendation: Don't use "desktop" by itself anymore in the IA, because of laptops (which are mobile devices but run desktop Firefox). Instead, use "Firefox for desktop and laptop" and

just “Firefox”.

Recommendation: Don’t use “mobile” by itself anymore in the IA, because of laptops and tablets. In addition, “mobile” is becoming a term that describes people in motion with their devices rather than a description of the type of device. “Firefox Mobile for Android” can solve some problems, but “Firefox for Android” “Firefox for iOS”, and so on (using the OS name for a qualifier) would be even more future-proof.

Issue: People discussing issues should be able to upload screenshots. Contributors want to write an article about how to do that. The site search queries show lots of questions about screenshots.

Recommendation: Add two content items:
1: A page to gather screenshot add-ons and how-to information.
2: An article to instruct contributors on how to add screenshots to posts in the forum.

Bug: OS switcher on the page today is buggy in Safari. Sometimes it doesn’t display anything but “+” and sometimes it displays the wrong OS.

Open Issue: Answering forum questions requires contributors to send people to an article or a canned response (often URLs to articles or parts of articles). Process: Open article, write wiki code for in-page links, send. Contributors want autocomplete for name of articles, they need a table of contents for the articles, they need to be able to select entire sections of content, then embed that piece of article in answer.

Recommendation: This process needs to be addressed at the application UI level, but having a landing page for the KB and landing pages for topics is going to help quite a bit.

Issue: Presenting a few OS options at a time, and varying them from page to page doesn’t help the user form a mental model of the supported OSs for Firefox or understand the information available for his or her platform(s). A product-based slice of the website you can browse to will help address this need to see the applicable content problem.

Recommendation: Expose the OS choices in the browsable new website in a product picker, where people can pick a product, change OS if they need to, and browse the available content for that platform.

Issue: Many articles refer to “options” but the entry point is called “preferences” on MacOS.

Recommendation: Options and preferences can be search synonyms, but for browsing and instructional purposes, people who need help with controls need to have the control referred to by name, in this case the actual menu item name, or they need to see something, for example an image with an icon highlighted, so they can find the place in their UI where they can start

following the instructions. So either the thing needs to have one name cross platform, or the KB page needs to reflect that menu item or control name customized for that platform.

Issue: Articles are not dated, so the visitor can't judge relevancy. It seems like a problem because the versions are changing so much, and we don't know how old the instructions are. That said, the articles are supposedly not out of date currently. It might make sense to start showing product version relevancy on articles, if the articles for enterprise frozen versions of products will differ substantively from the current version's articles.

Issue: wiki.mozilla.org has a lot of info that's good, for Mozilla contributors in general. It needs to be searchable, and it needs to be deep-linked. Where can it go in the IA?

Recommendation: Put wiki link on the forum landing page where the newsgroups will go, as a short-term solution. The content should be pulled into SUMO though, so it can be indexed.

Future research: Matthew mmiddleton@mozilla.com worked the chat in SUMO for years and he knows a lot of the FAQs as a result. Any deeper look should include him.

Finding: Chrome has a language translation widget that is driving a feature request for the same for Firefox. This issue might be driving some of the queries we see for "language" and "translate" in the site search logs.

Source: Elena Moon's review

The home page product facets are unclear because of size, yes, but also because of (as Elena points out) ambiguity. Desktop, is that where I am? What does this have to do with my deskop? (internal jargon); Mobile, is that the mobile version of this website? That's what it usually means. Firefox home? Is that not where I am? Should I go there first? I thought this was "home". Firefox Sync? Thunderbird?

Why does this SUMO home not also play nice with Firefox home? Or is there a Mozilla home? Need two-way and some universal nav items/placement.

Recommendation: Critical: Navigation needs to support leaf-node entry. Up, lateral, top nav at a minimum. This means also a very strong *you are here* signal of some kind.

Elena mentioned adding "back to previous page" navigation, but that label doesn't make sense if you have never seen the designated "previous page". Instead, provide up and lateral navigation.

Recommendation: Related items (see also "x-ref" links) should cross topical boundaries when the user's task also would, but also it's important to show additional content in the same bucket,

often referred to as the fish-eye view or the “neighborhood” view. This content gives you the lateral navigation by providing “other topics in X” or something similar in a sidebar or bottom link list.

Recommendation: SUMO must have breadcrumbs (more of them) as well, to provide “up” navigation for those visiting a deep leaf node. Even when people don’t click on breadcrumbs, they often notice them. Breadcrumbs help people develop a mental model of the information organization scheme.
http://usabilitygeek.com/12-effective-guidelines-for-breadcrumb-usability-and-seo/

Recommendation: Elena’s right about the Home link: Left top, logo, and also in the footer (if footer nav) but avoid calling a lot of things “home”. Always qualify them if you must use that term, such as “Mozilla Support Home”. Everything else is a landing page.

Agree: Elena gave good advice around registration:” .”

Agree: As Elena says on slide 7, most of the content is probably too granular on Home. These are not grouped, they are apples and oranges and beets. It is appropriate to show the hot issues/trending topics but topical groupings, as she points out, should be as discrete as possible, so that each person can confidently discard unwanted choices immediately at each level.



Recommendation: (slide 13, excerpted above) This microcontent “Click here if you need help installing and administrating Bugzilla” and its near-identical twins is the exact opposite of what you should do on a page like this and with lists in general.

Best practice:

- Make the whole area clickable for each product, words and image.
- Do not say “click here.” Make your links look like links (and your buttons look pushable), and you won’t have to explain how to operate your UI.
- Put the information-carrying words first: The product name.
- Don’t expect people to memorize your brand names and what they do. Provide information such as “web browser” and “email app” that describe the function of each.

Recommendation: Keep the FAQ(s) and manage them as a resource for self help. They don’t have to be called FAQ, but good answers to common questions are like helpdesk gold. The lists

should change as bugs and usability issues are fixed. Ideally an FAQ would link to fix discussions and articles, perhaps by doing a search in the context of the question.
Recommendation: Home page text wrapping is distracting and the width is fixed. Use vertical space and move toward elastic design.

Agree: Home page should be product neutral, to future-proof it.

Search UI

Recommendation: Make the search box longer to encourage users to enter more than one word. 27 characters is our recommendation currently, based on typical long-query length on many websites. The recommended size has grown slowly over the years.

Recommendation: Put the label on the button, not in or around the field. Include scope if there is one, e.g. “Search knowledge base” on the button itself (users tend to ignore text around search forms). Use normal submit form, not Javascript, to activate the button.

Recommendation: Unify search under the hood and facet results by kb / forum / <other> like Yippy (aka Clusty) does, but with fewer facets: http://yippy.com/

http://search.yippy.com/search?query=firefox+private+browsing&tb=sitesearch-all&v%3Aproject=clusty

Recommendation: Keep the number of input fields on a page to a minimum. People get confused easily by multiple places where you can type things (search boxes and email signup boxes are often confused, for example). Having several search boxes, or things that look like search boxes, in the UI of the browser and also in the UI of the page quickly overwhelm people. People usually don’t read instructions around form fields; they read the label on the button. When they are distracted or don’t speak the language well, the button might not be read either.

Recommendation: As Elena Moon suggested, combine search results until search can be unified. Seriously consider adding the option to search again on Mozilla.org if indexes can’t be combined.

Agree: slide 18
Elena:
• A contributor advanced search interface should be exposed only to contributors
• Remove Discussion Forums for administrators/authors or make it clear that this is not help content. If administrative forums remain, show visually that they are different from Support questions and Knowledge base
• Don’t use a Discussion Forums as a label. This label is better suited to Support Question
• Change Support Question label to Discussions or Community Forums
• Use system-wide taxonomy to define filters and tags within advanced search

• Search field should support tag searching as well
• Allow people to search across Knowledge base AND Support Questions rather than restricting them to one or the other. With a comprehensive taxonomy, these two templates should easily be combined in a single unified advanced search

Recommendation: Avoid advanced search. Facets for refining results are always more successful than multiple choice criteria in dropdowns.

Agree: slide 28: “It is unlikely that the majority of people will know how to access a list of the plugins on their device.”

Recommendation: Browsers should be self-reporting. If the check-your-plugins page can do it, so can this form. Display the information so people can see what’s being transmitted.

Recommendation: slide 29: Make it clear when the user enters an email address that it will not be posted publicly but it will be used to send people’s replies and to verify that they themselves signed up, so the user will give a valid address the first time through the process. People should be able to change their reply-to address in their profile at any time.

Recommendation: Top and bottom search is good on long search results pages. On some devices scrolling back up is annoyingly difficult, and after you get to the bottom you decide whether to search again or not. A back to top HTML jump link works well too (don’t use Javascript to activate links).

Agree:

slide 39, The Mint model is sweet. Their situation is less complex, perhaps, but the workflow is short and easy to understand.

slide 47
Predictive search is a great way to use your controlled vocabulary (tags) and preferred terms.

slide 48
Popular answers are a great thing to show

Recommendation: Display dates in an internationally unambiguous format by spelling out the month or month abreviation. “1 Jun 2011” can be in any order and you can still understand it.

Source: Ethnio Survey

Finding: It's clear from looking at the answers to "Briefly describe what info you came to support.mozilla.com to find" that a lot of people do not separate browser from web.

Recommendation: Teach people what a browser is in the getting started area. Some good mental models would really help people understand what's going on. It's not surprising that people don't know what a browser is. They know they click this thing and that's the internet. Many don't understand where one website starts and another ends, because they don't have to in order to get their tasks done. Unfortunately when something goes wrong, they can't describe the problem because they don't understand how the pieces fit together. Without a good mental model, they can't follow instructions very well either.

Further research: Misspellings are extremely common, both typos and phonetic spellings. The search engine needs to deal with those somehow. Many misspellings people use are going to be near the bottom of the search logs, but some digging should turn them up.

Recommendation: People expect to be able to find a way to contact support, email support, get help with technical issues, unanswered questions, and so on. So every permutation of that desire's phrasing should be a fruitful search term, and it's important to explain how best to contact support in places where people look, so they find it before they get frustrated.

Speculation: It looks like some people are confused between Firefox and Thunderbird. Perhaps they look too much alike, but also see the Thunderbird notes on how those pages don't explain what Thunderbird is.

Finding: Quite a few people want performance enhancement information. ("Slow")

Recommendation: There are lots of good reasons people need downgrades. If they are not freely available, there should be a fast way to make the case in the forum that one is needed.

Recommendation: Wherever installation information exists, also provide uninstallation information.

Recommendation: Explain error messages such that when people search for them, they find some helpful things to do.

Recommendation: Many people want to know what version of Firefox they have, so they can figure out if it's compatible with other software and websites they need to use. Make this really easy to discover on SUMO. Apparently the menu item is not always being found. They also want to know if it's 32- or 64-bit.

Recommendation: It's important after upgrading for people to be able to find out what's new. Currently a lot of good things happen in terms of plugin and add-on compatibility checks, but the informational page about the updates appears when people are doing something they care about, so they need to be able to get back to it later when that's what they need to know. That info link seems like a good thing to put in the Help menu.

Finding: I see lots of password problems with saved passwords. People need to change them, and they need to log out or know that they are logged out. Again, the mental model is lacking, so they can't figure out how to address it. Also the controls may be hard to locate when you're observing the problem in another place in the UI.

Recommendation: Learn the basics topics need to cover quitting, restarting, and everything on the View menu (covering all the stuff on all the menus would be better).

Recommendation: Make it easier to toggle the pop-up blocker on and off, for better compatibility with older web apps.

Recommendation: Compatibility is a big deal, and it's not best dealt with after an irreversible update. While it's laudable to try to eliminate update hassles by doing it in the background, if your most important plugins are left inoperable or you can't log in to your extranet at work anymore, that's pretty disempowering, and it can drive people to other browsers. Registering and posting in the forum to try to resolve such issues is not the way to go. It won't scale. It would be great if people could have an undo if they find themselves in a situation where they can't work anymore because of an upgrade surprise and the inability to log in afterward. Maybe for most people it's not a problem, but for those who are rendered unproductive, it's an emergency.

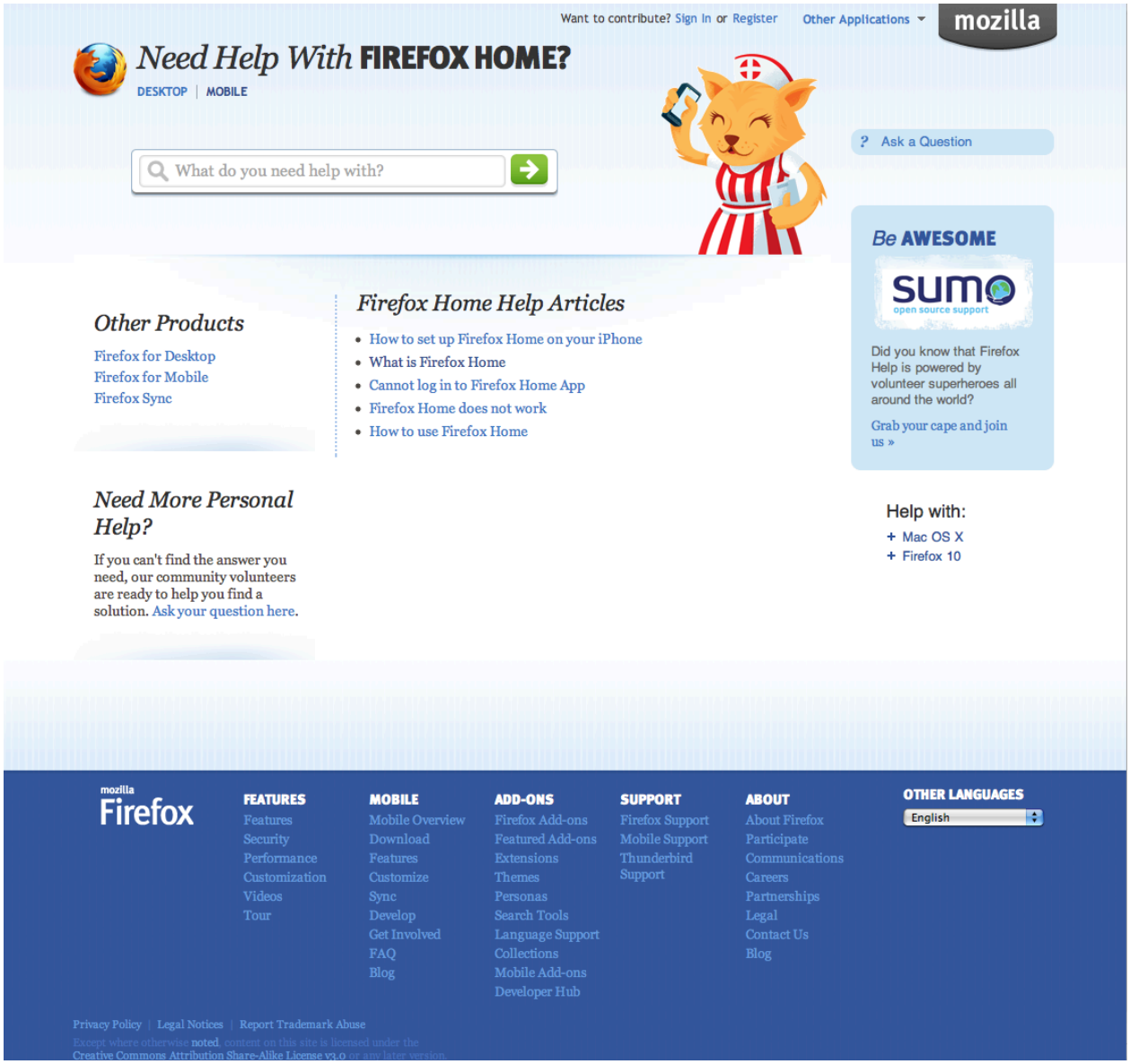
Miscellaneous

Multiple home pages for SUMO

Home page strategy for testing in prototypes and A/B: Consider putting both Task and Product facets on the home page, test to see which get the most action, then emphasize entry point. Don't use a product menu, but use space for explanations. Home page could have very brief explanations (Firefox - browse the web; Thunderbird - Email; etc.) while the all-product landing page can show more.

Issue: Currently the landing pages from product help are different than SUMO home. Users should definitely land at the top of the tree branch for the product they were using to get to SUMO.

Recommendation: The landing pages for the products via product Help menu should be beefed up to provide a product landing page with sub-products and other attractive enhancements and activities. Putting those pages on SUMO proper will give SUMO search a chance to index them, which might help searchers too.



Firefox Home has a confusing name, especially in the context of a website that has a Firefox home page, in the context of an organization that still hasn't adequately explained the difference between Mozilla and Firefox, let alone what "home" means in a world of 250 websites or whatever it is now.

Recommendation: It would be great if this product could have a more indicative name.

Recommendation: This page, and every product landing page should say what the product is, what it does, why you want it and how to get it. Mobile has this problem, and so does Thunderbird, so they all might need this tuneup. Page title tags too. For example "Community-powered support for Mozilla Messaging" is a very poor name for what is actually the Thunderbird support forum.

Recommendation: Product landing pages, like this one, should have a different look than the home page so they are not confusable. Currently the character, the colors, and the layout all contribute to the confusing feeling of not knowing where you are by making them all look the same. Even changing the character would help. Other companies do this with product logos and product-section color differences.

Recommendation: Use a much more prominent and articulate "you are here" signal in the new design.

Ask a Question

Open Issue: The Ask a Question process needs to be streamlined, because some askers give up before getting an answer; but also, keeping contributors is difficult because of the duplicate questions. The redesign must find a balance that doesn't annoy or discourage askers and that makes both asking and answering easier and faster to do.
Finding: There are two pages for "Ask a Question" now, and one has just been put in robots.txt to pull it out of search engine indexes. That one has a hackable URL that contributors use to get to localized content, so they want to retain it in the new IA. I have not put it in the new scheme but it seems like a reasonable request to retain the page, if Google does de-index it. Right now both Ask pages are in the top 10 pages list (for traffic). It might be that building a mechanism for switching locale instead would make more sense for the contributors, since this is a very hidden page with an obscure feature.

Question: On https://support.mozilla.org/en-US/questions/new?category=d1&product=desktop
If someone enters a question and doesn't register, is the question still captured? It should be, because it's important for SEO, voice of customer vocabulary, and measuring dropoff rates for the task.

Goal: If you search from anywhere and land on a page that doesn't answer your question then you click on "ask a question" (a processs now 5 clicks long, which will soon be shorter, because we won't ask the user to do tagging.) The system will try to autotag the question, and moderators can change tags as needed. This interaction flow should be addressed in the prototype stage.

Consider Crystal's suggestion: Cookie visitors, if they search, then allow them to go to the

forum)

Recommendation: Message returning askers with new-answer notification.

Recommendation: Everyone should be able to ask a question or report a problem from wherever they are in the site, so that item needs to be in the SUMO navigation bar and it should also be promoted in the content area after a person has looked for an answer with search or by browsing the KB. It is currently available in the sidebar on most or all pages, so continuing to do that is another good option.



Why is “cookies” in the search box? It’s appropriate to keep queries in search boxes on SRPs, but on pages like this, it just helps hide the search box to keep text in it, and if anyone notices it,

they might become confused about where they are.



Can you see the visited link? The contrast is way too subtle.

Recommendation: Visible link color and contrast should be fixed in the redesign, so that people don't look at the same pages again and again while looking for something they need.