

Search Becomes Personal and Social

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Abstract

It has been many years since search results were simply based on how often your search terms occur in a document and where. In 1998 Google added another dimension by including links to a page as a key element of their sorting algorithm. Bing claims to have 1000 ranking "signals" and Google 200, each of which may have up to 50 variations but these are now overridden by localisation, personalisation and the searcher's own social networks. Providing information that is directly relevant to the country and even the town in which a user is located is not new but with more searches being conducted via smart phones this has become an increasingly important factor when presenting results. Personalisation based on past search and viewing behaviour is commonplace and now activity within a searcher's own personal social networks is often given priority. Google, for example, has openly stated that it is combining information on a user's behaviour on all of its services to provide "a better, more intuitive user experience across Google for signed-in users". How can we use and control customisation to our advantage when carrying out serious research; can we switch it off; and how can tools such as Mendeley and Paper.li improve the quality of our results?

How do search engines search and sort results?

The days when search engines would sort your search results solely according to how often and where your search terms appeared in a document are long gone. The country in which you are based - calculated from your IP address - soon became an important criteria for calculating relevance and search engines developed country specific sites that give priority to local content. In 1998 Google added another dimension to search by including links to a page as a key element of their sorting algorithm. This was followed by customisation according to the type of searches that you conduct and the sites that you visit, known as search or web history. This has been used by many of the search engines for at least four years but initially the differences were subtle and barely noticeable. Location has now become even more important with the search tools using the city or town. While useful when one is travelling and using a smartphone to identify places and display directions on a map it can be a hindrance when conducting research at a national or international level. Search history is now used more aggressively to tailor results and your activity on social networks such as Facebook "Likes", Google "+1" and tweets affect not only your results but also the results of your network friends and contacts.

The full details of how results are ranked are secret but Bing has at least 1000 ranking signals and Google 200 each of which may have over 50 variations. ("Dear Bing, We Have 10,000 Ranking Signals To Your 1,000. Love, Google" <http://searchengineland.com/bing-10000-ranking-signals-google-55473>).

How far does personalisation go? My own experience is that with complex searches using advanced commands and multiple keywords there is very little but with a simple two or three keyword search the difference is more pronounced. Mary Ellen Bates organised an interesting experiment in which she asked the members of the AIIP network (Association of Independent Information Professionals) to run a Google news search on the one word Israel. The experiment does have flaws but nevertheless it highlights the important point that the 37 people who participated saw very different results even when based in the same country.

(See "Google can seriously damage your news" <http://www.rba.co.uk/wordpress/2011/09/03/google-can-seriously-damage-your-news/> and "Is Google really filtering my news?" http://www.librarianoffortune.com/librarian_of_fortune/2011/09/is-google-really-filtering-my-news.html).

Anne Rooney saw very different results when running a search on the name 'Borromeo' on two computers and signed in with different accounts. The first gave her information on a sixteenth century cardinal: the second concentrated on an Italian fashion model. ("An Awfully Big Blog Adventure: The answer to your question... depends on who you are" <http://awfullybigblogadventure.blogspot.co.uk/2012/04/answer-to-your-question-depends-on-who.html>).

As we shall see later Google is experimenting with even more extreme personalisation involving its own social network Google+.

Why the emphasis on personalisation?

It is all about money and advertising revenue. In 2011 Google's revenues were USD 37,905 millions, 96% of which came from advertising. Google needs people to stay on its sites, click on advertising, and purchase services and products. To encourage them to do so Google attempts to make search results and the advertising that is presented to them more relevant. But Google has a problem and it is called Facebook. A recent analysis of web traffic showed that on average Google had 153,441,000 unique visitors per month and Facebook 137,644,000. However, people are spending more **time** on Facebook - an average of 7.75 hours per person per month compared with an average of 1.75 hours on Google. ("How People Spend Their Time Online- Stephen's Lighthouse" <http://stephenslighthouse.com/2012/03/14/how-people-spend-their-time-online/>). This means that people are exposed to targeted advertising for longer on Facebook than on Google, which could result in lower revenues for Google.

But Facebook isn't a search engine and Facebook users will still go to Google for search won't

they? Facebook does already have a search option that uses Bing but it is not that obvious and not well integrated into Facebook. There are rumours that Facebook is seriously considering improving its search facility either by better use of Bing or by using another or totally new engine. (See "Facebook Delves Deeper Into Search" Businessweek <http://www.businessweek.com/articles/2012-03-28/facebook-delves-deeper-into-search> and Phil Bradley's weblog "Facebook challenging Google on search RSN" http://philbradley.typepad.com/phil_bradleys_weblog/2012/04/facebook-challenging-google-on-search-rsn.html).

Google may take solace from a survey that suggests 48% would "dislike" using search within Facebook. ("A Facebook Search Engine to Rival Google? Users Dislike That Idea [Survey]" <http://searchenginewatch.com/article/2174664/A-Facebook-Search-Engine-to-Rival-Google-Users-Dislike-That-Idea-Survey>). Only 500 people were surveyed, though, and if the search option was easy to use and the results of reasonable quality users may not go to the effort of leaving Facebook to search on Google. This is why Google is doing so much to customise search and to encourage us to join their own social network Google+.

Major changes to Google

Google's new privacy policy was introduced on March 1st, 2012 and replaced separate policies for over 60 services with a single, shorter document covering multiple products and features. More importantly for us as researchers Google combined information that it had gathered about us from our use of the different services to create a single profile.

"Our new Privacy Policy makes clear that, if you're signed in, we may combine information you've provided from one service with information from other services. In short, we'll treat you as a single user across all our products, which will mean a simpler, more intuitive Google experience.....we're more excited than ever to build a seamless social experience, all across Google"

"Toward a simpler, more beautiful Google"

<http://googleblog.blogspot.co.uk/2012/04/toward-simpler-more-beautiful-google.html>

This means that Google can now use your likes and preferences in YouTube or Google Reader, for example, to influence your web search results.

You can get some idea of what Google knows about you by examining your Google account dashboard. Sign in to your Google account and go to <http://www.google.com/dashboard/>. Your ad preferences will also show what Google thinks interests you (<http://www.google.com/ads/preferences/>). Although the categories that are listed are used to present you with more relevant advertising they are an indication of how Google may alter your search results to reflect your interests. (Note that you will not see any categories under ads preferences if you have opted out of targeted advertising or if you regularly clear your search cookies).

Immediately after the introduction of the single policy I noticed significant changes to some of the Google services when I was signed in to my Google account. On the YouTube home page for example I was presented with a video on financial markets (I suspect Google was using my recent web search history), a series of videos about the town where I live, and then a list of clips mentioned by my contacts in my Google+ circles. If this degree of personalisation is of no interest or hampers serious research, the answer is simple: clear and disable your search history, sign out of your account and clear all search cookies. Google, though, does not want you to do this because it needs to gather as much information about you as possible in order to deliver "*a simpler, more intuitive Google experience*". So it has started to introduce extra features that it hopes you will find indispensable but which are only available as a signed in user.

I have an android smartphone and make heavy use of Google maps for locating places of interest and finding directions. Google now offers a range of local search options that can be shared between my desktop computer and my phone simply, but I have to be logged to my account. I must confess that I love it and that is the problem with personalisation. For some purposes it is extremely useful, whilst for others it is a hindrance. ("Google Enables Cross-Platform Local Search (As Carrot To Relinquish Your Privacy)" <http://searchengineland.com/google-enables-cross-platform-local-search-as-carrot-for-web-history-113811> and "Introducing a new local search experience across your devices" <http://insidesearch.blogspot.co.uk/2012/03/introducing-new-local-search-experience.html>).

Enter Google+ and Search+

Google Plus (<http://plus.google.com/>), or Google+ as it is now known, is an attempt by Google to develop its own social network, to encourage us to spend more time with Google and divulge more information about ourselves. It is similar to Facebook in that you connect with friends and colleagues and add them to lists known as 'circles'. You then receive their postings on your home page. When posting an item on Google+ you can make it public or restrict its circulation to people within a specified circle.

Google is now forcing new users and existing users who wish to use a new Google service to sign up or "upgrade" to a Google+ enabled account ("Google Now Forcing All New Users To Create Google+ Enabled Accounts" <http://marketingland.com/google-now-forcing-all-new-users-to-create-google-enabled-accounts-3912>).

Google is also testing a new version of its search on Google.com called Search Plus Your World (SPYW) or simply Search+. Search+ gives priority to content from people in your Google+ network. The first issue is that of relevance but the second is more important for those of us who carry out research and compile reports for our clients. With respect to relevance my experience has been both good and bad. In some cases the content that Google found in my circles has been totally irrelevant to my query but in others it has given me an interesting and different point of view on the subject. Whilst the latter is positive it presents me with a problem when reporting back to a client with my findings. I have to check whether the writer has made the content public

And what about Bing?

Google is not the only one forcing personalisation and social content on searchers. Bing has been using what it calls "adaptive search" for at least a year and is tightly linked to Facebook and Twitter. ("Bing to use Facebook, Twitter more in fight against Google" | ZDNet <http://www.zdnet.com/blog/facebook/bing-to-use-facebook-twitter-more-in-fight-against-google/8631>). It is taking this a stage further and launching a social sidebar that will appear on the right of the search results page. It will include Facebook comments and tweets, but social suggestions might also come from LinkedIn, Quora, Foursquare, Blogger and Google+ ("Bing Relaunches, Features New Social Sidebar" <http://searchengineland.com/the-new-bing-microsoft-tries-again-with-search-meets-social-120728>)

Should we allow personalisation and socialisation in search?

Personalisation and the inclusion of content from social networks is not necessarily a bad thing. Yes, it does bias results but it can present you with a different perspective on a topic that you might otherwise have missed. For this reason I always have two different browsers open for search. One is never logged in to any account, search history is cleared and disabled and cookies regularly cleared. The other has search history enabled and stays logged in to various networks and accounts.

If you do want switch off personalisation then:

- log out of all search engine and social media accounts when searching
- disable and remove web/search history
- actively manage cookies or automatically delete cookies when logging out of your computer
- In Google use Verbatim/Doslovně in the left hand menu on the results page - this seems to remove most of Google's attempts to "enhance" your results
- Install Chrome (owned by Google!) as your browser and use the Incognito window to anonymise your search

Alternatively use a search tool with less or no personalisation:

Seznam - <http://www.seznam.cz/>

DuckDuckGo – does not track, does not personalise <http://duckduckgo.com/>

Blekko <http://www.blekko.com/>

Yandex.com – International version of the Russian search engine

<http://www.yandex.com/>

Million Short – omits the top million most "popular" sites from results

<http://www.millionshort.com/>

Embrace social networks as part of search

So much discussion occurs within social and professional networks that it would be foolhardy to ignore them. On the contrary, we should actively incorporate them into our strategies. Although Bing and Google include some social content in their searches, more reliable results can be obtained by searching within the network itself, for example Facebook or LinkedIn, or by using specialist tools. A few are listed below:

Bing Social (for Twitter) <http://www.bing.com/social/>
<http://search.twitter.com/>
<http://topsy.com/>
<http://www.socialmention.com/>
<http://www.icerocket.com/>
<http://whostalkin.com/>

Two tools that I find particularly useful are Mendeley (<http://www.mendeley.com/>) and Paper.li (<http://paper.li>).

Results from Mendeley often appear in the top Google results for scientific queries. It is a social bookmarking and collaboration tool for researchers and scientists and enables them to bookmark and collect articles that they are using as background or citations for projects and papers. Many of these collections are publicly accessible and there are good advanced search options. Once you have found a relevant article, you can view others that have been placed in the same collection (related articles). This is an excellent way of finding additional documents on a topic and many of them are peer reviewed and of high quality. Mendeley can also help identify experts on a subject.

Paper.li searches Twitter and Google+ for your keywords or hashtags and identifies tweets and postings that contain links to articles, web pages, photos and videos. It then creates a newspaper style web page that summarising the content of those links.

You can create a newspaper for:

- single Twitter user
- you and the people you follow on Twitter
- a Twitter list
- a Twitter hashtag
- keywords on Twitter
- a Google+ user
- keywords on Google+

(There are also options for searching Facebook but I'm afraid have never managed to make them work.)

I have created a daily newspaper for the people that I follow on Twitter and it is a very quick and easy way of catching up with important stories that my contacts have highlighted. I also track companies and topics on both Twitter and Google+.

Three examples of my Paper.li newsletters are at:

<http://paper.li/karenblakeman> - people in my Twitterstream

<http://paper.li/karenblakeman/1321447614> - biofuels

<http://paper.li/karenblakeman/1321288089> - mentions of BASF on Twitter

Conclusion

Personalisation and socialisation of web search is here to stay. It can seriously bias and restrict our search results but also gives us important, alternative points of view on the world. It is important that we understand how personalisation and our social activity influence results, how to avoid their impact when necessary, but also how to embrace them as part of our search strategy.