Trabajo Práctico: Google Search

Material de consulta:

- Amir Efrati. “Google Gives Search a Refresh”. The Wall Street Journal. 2012.
- Revisión bibliográfica Web. Sugerencia: http://www.hongkiat.com/blog/what-comes-after-web-20/

1. Lea el articulo”Google Gives Search a Refresh” De Amir Efrati. Responda las siguientes preguntas:

   - De qué manera piensa Google mejorar su sistema de búsqueda?
   - De acuerdo al autor, cuál sería la próxima generación de búsquedas?
   - Cuál sería el impacto de estos cambios para Google?
   - Que elementos semánticos tiene actualmente Google?
   - Compare y ejemplifique las búsquedas actuales con las búsquedas semánticas. Utilice un ejemplo similar al del artículo.

2. Desarrolle la progresión entre la Web 1.0, 2.0, 3.0 y 4.0. Explique los cambios realizados/esperados en cada caso. Mencione tecnologías y aplicaciones. Mencione el rol del usuario en cada caso.

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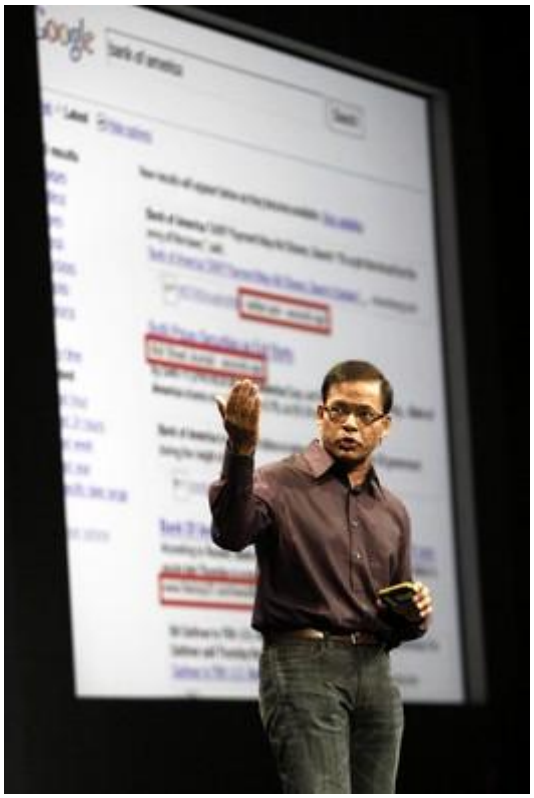
Google Gives Search a Refresh

Updated March 15, 2012, 2:46 p.m. ET

AMIR EFRATI

Google Inc. is giving its tried-and-true Web-search formula a makeover as it tries to fix the shortcomings of today's technology and maintain its dominant market share.

Over the next few months, Google's search engine will begin spitting out more than a list of blue Web links. It will also present more facts and direct answers to queries at the top of the search-results page.



Associated Press

Google's Amit Singhal, shown in 2009, sees better matches for queries.

The changes to search are among the biggest in the company's history and could affect millions of websites that rely on Google's current page-ranking results. At the same time, they could give Google more ways to serve up advertisements.

Google isn't replacing its current keyword-search system, which determines the importance of a website based on the words it contains, how often other sites link to it, and dozens of other measures. Rather, the company is aiming to provide more relevant results by incorporating technology called "semantic search," which refers to the process of understanding the actual meaning of words.

Amit Singhal, a top Google search executive, said in a recent interview that the search engine will better match search queries with a database containing hundreds of millions of "entities"—people, places and things—which the company has quietly amassed in the past two years. Semantic search can help associate different words with one another, such as a company (Google) with its founders (Larry Page and Sergey Brin).

Google search will look more like "how humans understand the world," Mr. Singhal said, noting that for many searches today, "we cross our fingers and hope there's a Web page out there with the answer." Some major changes will show up in the coming months, people familiar with the initiative said, but Mr. Singhal said Google is undergoing a years-long process to enter the "next generation of search."

Under the shift, people who search for "Lake Tahoe" will see key "attributes" that the search engine knows about the lake, such as its location, altitude, average temperature or salt content. In contrast, those who search for "Lake Tahoe" today would get only links to the lake's visitor bureau website, its dedicated page on Wikipedia.com, and a link to a relevant map.

Powering up the Search Engine

Google is adding semantic technology to its keyword search system.

Keyword Search

Determines the importance of websites based on the words it contains, links to those sites and dozens of other measures.

Also factors in the person searching, such as his location and the time of day.

Semantic Search

Refers to the process of understanding the actual meaning of words.

Can differentiate between words with more than one meaning, such as the car brand 'Jaguar' and the animal 'jaguar.'

For a more complex question such as, "What are the 10 largest lakes in California?" Google might provide the answer instead of just links to other sites.

To provide answers that aren't already in Google's ever-expanding database, the company will blend new semantic-search technology with its current system to better recognize the value of information on websites and figure out which ones to show in search results. It would do so by examining a Web page and identifying information about specific entities referenced on it, rather than only look for keywords.

The coming shift has major implications for Google, which dominates the Internet search market with around 66% market share and more than 75% of all search-ad revenue. The Mountain View, Calif., company has succeeded because of the strength and ease of its keyword-search technology, which in turn fueled Google's search ads, which appear next to search results. That business now generates the majority of Google's $37 billion in annual revenue.

Now Google is taking action to maintain that lead. The Internet giant is trying to stay ahead of Microsoft Corp.'s MSFT -0.65% Bing in Web search, catch up to Apple Inc.'sAAPL +0.81% Siri voice-activated mobile search, and beat back rivals in niches such as product search.

Some semantic-search experts also believe the move will help Google to keep up with Facebook Inc., the social network that also has amassed a database about hundreds of millions of people, places and things but hasn't offered a robust search service.

Google also hopes the change to semantic search will entice some people to stay longer on the search site, said people briefed on the plans, amid competition with social networking sites like Facebook and Twitter Inc. that are claiming more Internet users' time.

For instance, people who search for a particular novelist like Ernest Hemingway could, under the new system, find a list of the author's books they could browse through and information pages about other related authors or books, according to people familiar with the company's plans. Presumably Google could suggest books to buy, too.

A Google spokesman declined comment about the potential changes.

Google says it is still tinkering with the new look and function of its search engine, so it's unclear exactly what this might mean for Google users and website owners. But the move could spur millions of websites to retool their Web page—by changing what's called a "markup language"—so the search engine could more easily locate them under the new system, said Larry Cornett, a former Web-search executive at Yahoo Inc.YHOO +1.72%

One person briefed on Google's plans said the shift to semantic search could directly impact the search results for 10% to 20% of all search queries, or tens of billions per month.

It's also unclear exactly how Google's search ads—which appear next to search results and are handled by separate teams inside the company—would change in response to the overhaul. But people briefed on the initiative said that if the search engine better understands the meaning or intent behind people's search queries, Google could find a way to show them more relevant ads.

As people spend more time on Google's search site looking through its extensive "entity" database, there would also be more pages, or inventory, on which to place ads, said a person with knowledge of the initiative.

Google's advertising executives have knowledge of the initiative and have considered ways to capitalize on it, said a person familiar with the matter. Mr. Singhal said his team is working independently of any advertising considerations.

Google has previously updated its core Web search technology. Most recently, it began tailoring search results to individual users based on their activity on Google+, the company's social network, and it is now instantly showing search results before a person has finished typing their search query. Google also can scan thousands of sites and give a "best guess" answer for limited sets of questions, such as, "Who is the chancellor of Germany?"

Google also currently has some other semantic-search elements, such as the ability to assess what the web collectively thinks are the most significant items associated with certain keywords. For example, a search for "30 Rock," the name of a popular TV series, will bring up a section called "Actor searches for 30 Rock" at the bottom of the search-results page. There, people can find a photo of each actor and a link to execute a new Google search for that name.

But the newest change is expected to go much further, coming as a result of Google's acquisition in 2010 start-up Metaweb Technologies, which had an index of 12 million entities, such as movies, books, companies and celebrities. By comparison, online encyclopedia Wikipedia has 3.5 million English entries, though they include more detailed information.

Mr. Singhal said Google and the Metaweb team, which then numbered around 50 software engineers, have since expanded the size of the index to more than 200 million entities, partly by developing "extraction algorithms," or mathematical formulas that can organize data scattered across the Web. It also approached organizations and government agencies to obtain access to databases, including the CIA World Factbook, which houses up-to-date encyclopedic information about countries worldwide.

More

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