A few thoughts --

1. I fully agree that we can & should to have a common infrastructure/repository and query model for all basic structured data, and be able to do compound queries across it

2. That said, some very valuable data will never be fully modelable in a general structure (e.g., flight+fare searches are np-hard, maps geometries/ vectors), and will require unique structures

3. The open web that we knew & loved is going away, and being replaced with a siloed world on both the web and mobile where companies don't want to make data externally searchable because they want users to be in their brand experience and/or they want to have a commercial relationship for access to their data; some of these are sufficiently concentrated that we either need to submit to a monopoly supplier, or commit to generating/maintaining our own data

4. Much data in the real world is dynamic and changes rapidly; the common repository and ranking is a part of the equation, but success requires engaging users, businesses, and other ecosystem participants with incentives that make sense to provide, update, and curate the underlying data, and we need to have data pipelines to ~instantly normalize and update data (e.g., volcanoes don't change very frequently, local businesses change at ~20%/yr)

5. How the experience is optimized and presented matters a lot, and the experience varies by context; we need to have better browse and session-based experiences -- where either there isn't any query (and we recommend or provide a browse start point), or the initial query narrows the data set that can then be navigated by facets & filters. User expectation is shifting from links to answers being OK to users wanting the answer directly (or the most direct/efficient way to get it).

6. While I agree we shouldn't do verticals generically, there are a set of areas that are pretty fundamental to users day-to-day experiences and needs, and are very, very valuable -- online shopping for goods and services (7% of total commerce and growing), local search (20% of desktop intent and 40% of mobile intent), and travel (>10% of our current revenues, REDACTED - ... global market); if we don't have experiences in these areas that are compelling compared to increasingly concentrated and branded alternatives, we risk losing relevance overall (e.g., Amazon is increasingly becoming the place you search for things and Google is the place you search for information). In these areas, the killer app is the the overall experience from intent to fulfillment (i.e., Amazon isn't winning because they have better search or a more general infrastructure, they're winning because the net experience from intent to fulfillment is much better). We don't have to own everything and we can work with partners, but our bar has to be a great end-to-end experience instead of just handing users off.

-Jeff

On Fri, Sep 21, 2012 at 12:04 AM, Alan Eustace ██████████████ wrote:

Crawling is just one approach to structure. For example, Youtube watches, Gmail, search logs, Chrome tab data, Android call data, etc will give us information that no other site has about the entire process of where the best kite boarding sites are, what you need to do to plan the trip, what times of the year are best to go, what equipment to bring, where to rent, what the temperature is, first-hand reports of being their, pictures, what your friends say, what the experts say. That experience cannot be replicated by verticals. We have that data. I might not be able to book a hotel, but I can create a great experience that drives traffic to the best sites to answer the detailed questions or handle booking. We don't need to own everything. Using the data we already have, there is a good chance that we know you are moving, changing jobs, having a baby, getting married, etc, and we can really help you with the queries that you should have asked but didn't. We have a value proposition that nobody else has. The technology is not quite there, but it is getting really, really close.

Alan

On Thu, Sep 20, 2012 at 11:48 PM, Susan Wojcicki ██████████████ wrote:

I think the issue is more complicated than crawling those remaining 30% of the web. There are too many special purpose sites that offer great SEARCH experiences within their area of expertise and users are willing to go their directly. eg searching for a hotel on Booking.com for example, reserving a restaurant with OpenTable for example. I don't think crawling those sites will mean we offer comparable experiences to help me actually find a hotel or booking a table.
We need to distinguish between looking for facts, and taking a commercial action. I agree your solution will work for facts, but not for commercial transactions.

On Thu, Sep 20, 2012 at 11:40 PM, Alan Eustace ██████████████ wrote:

We absolutely need to create ecosystems that encourage 3rd parties to give us data, or to mark up pages so that we can get the structure as we crawl, or to find ways to get users to give us that data directly, or to use search history and chrome logs to get that data. I believe this is an easier problem than building verticals. For example, 70% of all the pages that are viewed have special purpose markup that the sites added to help Google understand the structure of the content, so that we can better direct traffic to those sites. I don't believe we have pushed hard enough, and because of that, we are making enemies of sites that could be friends.

Alan

On Thu, Sep 20, 2012 at 11:30 PM, Susan Wojcicki ▬▬▬▬▬▬▬▬ wrote:

> I agree with what you are saying IF the information is available on the web and not in silos, closed databases on other sites.
>
> Restaurants in Palo Alto is not the same as comparing cars, or finding car insurance or finding which hotels are available on specific dates and at what prices; restaurants in Palo Alto is based on info that is on the web so we can search and compare it, the other experiences have the information in proprietary databases where different companies have added value by gathering that information.

Susan

On Thu, Sep 20, 2012 at 11:12 PM, Alan Eustace ▬▬▬▬▬▬▬▬ wrote:

> You know my position.
>
> I don't think we want to fight amazon on their turf by building and branding a single purpose experience by a separate team.   The same goes for Yelp and Local.   What we need is to have the underlying data in the same format and data store, and support operations and user experiences that work across all of them.   We should build an interface that makes it as easy to compare products as it is to compare hotels, or resorts, or flights, or hiking trails, or wedding site locations, or colleges.
>
> Yahoo in 1998 was on top of the world, with a huge fraction of all the traffic on the web. They built narrow verticals in finance, news, autos, etc, but they lost to search engines and the web.   Finding great content is more important than owning all content. What google needs is deep generic experiences in a general infrastructure, where the addition of data defines the experience, rather than teams writing special purpose code.
>
> Restaurants in Palo Alto requires the same infrastructure and ranking as volcanoes in Italy. What we need to do is to use the collective searching experiences of all our users to predict what will be valuable to users across all domains, and guide them to the right places on the web.   This is also the right data for Google Now, and for building great browsing experiences.

Alan

On Mon, Sep 17, 2012 at 1:43 PM, Nikesh Arora ▬▬▬▬▬▬▬▬ wrote:

> Folks:
>
> I am keen to have a conversation where we align the strategy we have on the new sets of products we are launching - which are more vertical searches. We are being asked for names for:
>
> - Hotel Search/ Finder
> - Travel
> - Autos
> - Finance
> - Shopping

While i have a view across them, i am more keen to ensure that we have a common point of view on these, and answer the questions consistently.

Q. Why are we doing this?

Q. What is the organic vs advertising model on these?

Q. What is the future advertising model against these searches? Going from CPC to CPA?

Q. What is the principle we are applying to the UI in each of these cases?

Q. How do we plan to scale these around the world?

Q. Do these have landing pages? Or are they part of the "evolution of search"? Do they need to have individual names, and individual launch times?

Q. Are these new "mobile apps" - are they integrated into GMS - or are they part of Google Now?

I think someone needs to be responsible - i think its somewhere between Susan/Alan/Jeff - and we need to be able to have a common point of view, also think Andy needs to agree from a mobile point of view.

We should get in a room and agree this - we are being asked to name these things, think naming isnt the issue - the issue is alignment on strategy, this will make Rachel's life easier as well.

Nikesh