

Google, it's Personal!

How to Improve Search Engine Services

I envision a search engine of the future where individuals have complete access to their own personal data. Not only will they have access to this data, they will have advanced visualization tools that could display trends in their behavior, provide health statistics, analyze their financial status and make real-time recommendations for social activities. This data would be completely private and not shareable on the world-wide web. It would also be possible to incorporate public data into this “private space” in order to make comparisons or other analytic decisions.

Today, most if not all of the information that is queried is “public data.” If one wants to know their health statistics, they are required to download apps which collect information such as heart rate and weight. In order to analyze this data, it must be uploaded and compared with other datasets.

I imagine that building one’s private database will not only be based on content from the World Wide Web, but it will also be integrated from multiple data-generating sources including wearable technology, GPS trackers (in mobile devices), point-of-sale transactions, credit cards, insurance company and healthcare provider data, among others. The problem, today, is that most user generated data is not owned by the user. It is owned by large corporations which determine how, when and why we access our own data. I believe that the future of data generation should be directed towards personal ownership, privacy and the granting of access and information sharing by the individual, not the corporation.

This private data space would require personal search engines. These would be customized to the needs of the individual user. For example, as one ages, it becomes more important to have a complete and accurate medical record. Today a patient is handed volumes of medical records in paper form, or images via CD. This information cannot be queried or used for comparative analysis without the consultation of a medical expert. Converting these records to private database could include personal health records from surgeries, labs, genomic data, studies, consultations, pharmacies and private physicians. Personal search engines could query and produce a medication list, current diagnosis, and a recommended treatment plan. Adding public data such as GPS data, healthcare costs and social networking ratings analysis could determine best quality care for optimum value. Additionally, giving individuals the power.



Over 25% of all patient visits are informational and can be replaced with quick access to available medical data shared on the web. Companies like HealthTap and Patient Fusion are finding ways to connect people with these data sources – but what if people could preemptively map trends in their own health without even needing to consult a physician or website? Having access to a personal healthcare data-terminal that could integrate with other predictive systems and models empowers individuals to be more educated about their health and lifestyle. Implementing widespread personal healthcare data-banks could revolutionize the insurance industry, reduce expensive inefficiencies, and cure preventable disease by empowering individuals to have the freedom be proactive about their healthcare.



Integrates with your other systems.

So what are we waiting for? We already have the tools. Companies like Wibi Data (started by the founders of Cloudera), for example, can provide “real-time machine learning and analytics capabilities [needed] to deliver personalized interactions across channels.” Their software platform integrates with point of sale, mobile app, ecommerce, inventory, web analytics, and social media and sits onto of Big Data and open-source technologies like Apache Hadoop, Key-value Stores (Apache HBase, Cassandra), Kiji, and Avro. Currently Wibi Data targets enterprise companies and retailers, but what if their systems were made available to individuals? What if we had access to a “Wibi Terminal” that tracked our healthcare data, bank statements, search history, and music preferences in real-time by integrating our personal data-generating platforms? Moreover, what if these terminals could connect us to outside predictive models, but in a way that gives us the power to dictate when and how our data will be shared?

Companies everywhere are creating invisible profiles of our online identities, but I believe empowering users to own their own data will not only enrich the depths of patterns and behaviors seen, it will give us the tool to harness our own data and proactively take part in the fascinating world of analytics. Moreover, industries everywhere are harnessing big data analytics to solve problems in the financial, healthcare, and education system, but in reality, all these industries interface with individuals and are fundamentally governed by their behavior – let’s empower individuals to be the first to revolutionize these industries in their own lives; we might be surprised by the change that will follow.