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Towards Perfecting Search

Infolution's Information Research Tools and Code Engines Promise Better Results for Organizations Large & Small

04/10/2008 by Richard Doherty

Nearly a decade ago, Bill Gates stood six feet from me and proclaimed to our assemblage of industry analysts that: "Good news! We've had some breakthroughs! Contextual recognition is just a few quarters away." Today, for Microsoft and its prime search rivals, Google, Yahoo and IBM, contextual or semantic search, still appears as distant as the horizon itself.

However, today, thanks to patented research and innovative semantic search implementations productized at Infolution, more than 200 organizations globally (including Intel, Philips and U.S. Homeland Security) routinely enjoy enhanced contextual search results. Derivative research and information glut handling tools licensed by Infolution support searches across multiple languages, databases, data warehouse architectures and poorly scanned documents both private and public.

In short, Infolution extracts knowledge from existing data; whether structured or unstructured. In an era of offices being combined and corporate mergers this ability to search across disjoint data sets is crucial to smooth information extraction. Faxes, scanned documents and emails (in multiple languages) all fit into Infolution's processing. In most search environments, the user must conform to the search environment, they must bend to accommodate the limitations of keyword search. In contrast, Infolution's tools appear more familiar to researchers familiar with research; making adoption faster for individuals and departments.

In too many organizations, workers limit their ability to add personal expertise to searches by using keyword searches which most certainly return skewed documents. Only by semantic search might a researcher develop interim results which allow them to better hone their queries to produce the information sets that are truly seeking. Traditional (overused!) keyword searches just deliver more and more clutter the more specific one tries to make the search words.

Research Leads to Humanized Search

Infolution founders and researchers dub this "humanized research." Research tools which take into account an individual's dialogue with the host machine to produce information results form a few queries. Compare this to the keyword search power of web-scouring search engines from Google, Yahoo, Microsoft and others which yield lower and lower quality results from public web documents and the searcher's own data sets. Worse, pub web searches are NEVER private and even the tools which use these vendors desktop tools are open to misuse inside and outside the organization.

The vast majority of valuable corporate and institutional data is all too often configured as unstructured data sets. Infolution handles these and corrects for spelling variations in keyed-in searches as well as handling PDF and OCR document scanning errors. Researcher selectable sharing allows duos and teams to collaborate much better than traditional search environments, accelerating time to information results satisfaction.

A flood of corporate mergers usually results in ad hoc data set integration, with data resources scattered helter-skelter. Again, Infolution tools rally and coalesce these traditionally disharmonious data repositories whether local, distant, web-based or any combination desired.

As an example, incoming email classification is usually a daunting task which many workers – and consumers - simply skip or establish at best a few "subject line" folder actions. Infolution and its developer partners have crafted simpler (automatic) rules which can, for example, prioritize mails which call for some action or response on the recipient's part. Sorting speeds of 400 emails a minute and mail baskets packed with up to 1.5 million pieces (including scanned physical mail) have been classified automatically.

The ability to search across multiple acronyms and multiple languages greatly reduces errors and boosts researcher freedom from dealing with the traditional bad results produced from more

traditional information search systems.

One particularly promising feature is Infolution's novel Enterprise Search Portal with the Information Canopy, which generates 3D visualizations from research queries. Scientific study and customer feedback shows that spatial representations of data set and information relationships helps many workers (and executives!) see patterns of information clustering which Infolution tools then aggressively refine with surgical precision.

Another valuable Infolution capability is "Speed Reading." It makes short work of familiarizing oneself through long, tedious documentation and reports. The document's essential information is retained even as paragraph sizes shrink and expand on user command. Work on a Chinese Reader which summarizes in English is just around the corner. The business value implications of this are huge!

Customers report pay back results in weeks and months, as opposed to quarters and years for most rival search architectures and systems. Just the learning curve for some commercial search systems (hardware and software) is many months - including installation of custom processor hardware (such as Google Enterprise). Infolution's simplest requires a scant twenty minutes.

Infolution's desktop and enterprise software solutions work on any PC made this decade, a blessing to non-profits and large institutions alike. Turnkey systems are competitive with Google Enterprise systems, yet offer refined semantic search results beyond traditional search giants' offerings.

Derivative Capabilities Abound

Judging from interviews with Infolution founders, their international team of engineers and architects have productized only a small portion of the company's information search expertise.

For example, Infloution's technology is not limited to the Windows or X86 platforms its existing hardware and software catalog supports. Their patented semantic search suites can be scaled up to huge data centers and inversely, shrunken down to handle very personal data such as confidential communications or medical records. Indeed, classifications of personal public, corporate, privilaged and secret data are all supported. These groupings speed search by various researchers who do (or do not) have the rights to full resource queries while preserving access, privacy and legal rights.

Perhaps Infolution's largest benefits could be both economic and "green." Consider the escalating costs of running large scale IT search. In an era when Information Technology accounts for upwards of 10% of the electric power needs and costs of some nations. Google is now building its proprietary next-generation data centers adjacent to hyrdo-electric power plants; both for low-cost power and water cooling! Imagine the effect a single 50% improvement in search efficiencies would make for data centers of this size, or for corporate needs for the world's leading corporations.

Lastly, the patented core semantic engine is so small, that it allows Infolution to license, partner or productize versions of this that could fit in consumer electronics devices or lead to Software As A Service business models for information search "on demand."

Imagine future portable medical recorders (such as EKG Holter monitors) which could store personal cardiac data for months at a time, yet allow a doctor fast access to just the data needed to diagnose an emergency. Imagine GPS tracking for transportation where millions of data records can be organized for fast Infolution analysis to help predict better traffic flows or optimize time of delivery regimens.

The engine is so small it could revolutionize the burgeoning universe of social web sits, from personal to business to governmental. Information patterns and new services, links could be developed on far more criteria than traditional keyword search methods permit.

In short, Infolution's information search products and tool suites together represent a combination of the most powerful core technologies and refined product implementations Envisioneering has seen.

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