Review: Flaws in Web's much-touted WolframAlpha

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Wolfram Alpha is easy to stump, but still computes a wealth of raw data.

(AP) -- When a free Web service called WolframAlpha launches in the coming days, the general public will get to try a "computational knowledge engine" that has had technology insiders buzzing because of its oracle-like ability to spit out answers and make calculations.

Which has a bigger gross domestic product, Spain or Canada? What was New York City's population in 1900? When did the sun rise in Los Angeles on Nov. 15, 1973? How far is the moon right now? If I eat an apple and an orange, how much protein would I get?

WolframAlpha will tell you - without making you comb through links as a search engine would. It also will graphically illustrate answers when merited. So if you query "GDP Spain Canada" you'd see a chart indicating that Spain's economy was smaller than Canada's most of the time since 1970 and recently pulled ahead.

That's pretty clever.

Yet after testing the service for a few weeks, I think WolframAlpha is unlikely to become a household name - and not just because of the gauze-in-the-mouth logjam of two "f" sounds in the title. While WolframAlpha is brilliant at times and elegant in its display, there aren't many ways everyday Web users would benefit from using it over other resources.

In the interest of full disclosure, I'll admit that I'm troubled by the potential for WolframAlpha. I fear the implications of an information butler that is considered so smart and so widely applicable that people turn to it without question, by default, whenever they want to know something.

What's that, you say? We already have such a service?

Well, for all the fears that Google is making us stupid by making it too easy to look up information, at least Google and its rivals enable the critical thinking that comes from scoping out multiple sources.

Unlike search engines that deliver links that match keywords in your query, WolframAlpha is more of a black box. If you have it perform a calculation, it gives you an answer, along with a small link for "source information." Open that and you'll generally be told the data was "curated" - found and verified - by the company behind WolframAlpha. In other words, "trust us."

The site does suggest ways to track down similar information from other sources, including government statistics, proprietary databases, almanacs and the collaborative encyclopedia Wikipedia. To confirm WolframAlpha's data I went a suddenly old-fashioned route - through Web searches on Google and Yahoo. I didn't find any errors, but taking that step made me wonder why I didn't just use Google or Yahoo to begin with.

WolframAlpha comes from Stephen Wolfram, 49, a British-born physics prodigy who earned a Caltech Ph.D. at age 20 and won a MacArthur Foundation "genius grant" at 21. Wolfram went on to focus on complexity theory, especially the idea that patterns in nature could emerge from simple rules, and founded Champaign, Ill.-based Wolfram Research Inc., which develops advanced math and analysis software called Mathematica.

Because Mathematica includes data "curated" by more than 100 Wolfram employees, over the years the company has built a wide knowledge base. Now WolframAlpha lets the wider world have a crack at it.

While the service is free, Wolfram envisions ads alongside certain query results. He might also offer paid versions with extra features.

The amount of data in the service is impressive. It can show the odds of lottery games in any state. By tapping birth stats and mortality data it estimates there are 2.8 million people named William alive in the U.S. today. It knows "The Big Lebowski" earned $17 million at the box office.

But often WolframAlpha can be unacceptably nerdy.

When I sought the distance from Boston to Philadelphia, the site told me 265.4 miles. And then it had to be a showoff. It also said the journey is 427.1 kilometers, 427,070 meters, 4.271 times 10 to the 7th power centimeters or 230.6 nautical miles. And that an airplane could travel that distance in 28.9 minutes, sound could do it in 20.9 minutes, light in fiber would need 2 milliseconds and light in a vacuum would need 1.42 milliseconds. That's even before I clicked on "more" to see how long the trip would be for a ship at 25 knots or a car at 55 mph.

Or consider that WolframAlpha is atrocious at sports, which is surprising given what rich sources of data they provide.

I kid you not, the query "Super Bowl scores" yielded the response "WolframAlpha does not yet support Romanian." If you seek a baseball team's pitching stats, you get a useless chart showing, among other figures, the number of batters a team faced in a season. This computing engine doesn't compute the earned run average. Obviously, it's not a golfer.

At least initally, WolframAlpha probably will appeal most to technical specialists - people who make calculations based on how many vertices are on a great rhombic triacontahedron (182) or what gene is 456 base pairs upstream of another given gene.

For most other people, WolframAlpha won't provide aha-wow moments that mark true game-changers.

Once when I was editing a story about a computer display that is 6 inches by 3.5 inches, I wanted to determine the length of the screen diagonal. I asked WolframAlpha for the hypotenuse of a right triangle with sides 3.5 and 6. WolframAlpha told me to calculate it by taking the square root of the sum of 3.5 squared and 6 squared.

Before I could ask, "Isn't that your job?" I queried "hypotenuse calculator" on Google and Yahoo. Neither had any know-it-all pretensions, but no matter: They found multiple sites that calculated the answer just fine.

On the Net:

http://www.wolframalpha.com