# The Visionary Way of Searching the Internet

Since May 16, 2009 the computational knowledge machine "Wolfram Alpha" has been online. The somewhat different search engine wants to provide the Internet users with intelligent solutions to their questions. It follows a conclusion after the first months of trial.

## Intuitive computer

In fact, Wolfram Alpha is no search engine, but a knowledge engine. Named after its founder Stephen Wolfram, the Web service tries to take a completely new way of searching the internet. While traditional search engines spit out tons of links on keyword input, it is Wolfram Alpha's aim to present the user directly with answers. To that aim that the knowledge engine uses semantic technologies. The collected facts for a keyword are processed by specific algorithms to gain synthetic responses. In theory this method sounds revolutionary. But in practice, the result currently turned out is still modest.

## Squibbed advanced praise

"That will be the new Google competitor," it echoed in the media shortly before launching of Wolfram Alpha. Shortly after the website went online, the experts were somewhat disappointed. Previously Wolfram Alpha was touted a "miracle machine", quickly it was revised to a "knowledge dwarf". The **database of Wolfram Alpha is still relatively weak. As an** US-centric project, there is currently only English speech recognition possible and even most of the English questions are fizzling out. You have to accept “Wolfram Alpha isn't sure what to do with your input" as answer on not scientific search terms. Only for mathematical problems of all kinds, the computational knowledge machine always has an answer at hand. Many of these results turn out to be "useless", because they lack any citations.

## Challenge for the future

Despite all initial difficulties, Wolfram Alpha demonstrates that the internet search with semantic technology could be proficient in the future. "When I enter the search term "quantum", Wolfram Alpha interpreted this term as "quantum" and one further click resulted in a list of all quantum calculations " was the result

of a test by the search engine expert Walter Karban. "With Google and Bing you should search for "photon energy" to achieve similar results. A semantic search could do this work for the user and list related terms for "quantum"" Semantic search engines accept natural language as input and try to recognize the meaning of the question. They don´t rank like Google, showing the result by relevance for the masses, but they are able to search according to criterions of the individual relevance. "However, it is difficult to get computers to cope with the natural language," says Karban. "The semantics can only rely on the existing information. Therefore, data root and definition are the most important aspects of the information search." Info: [www.wolframalpha.com](http://www.microsofttranslator.com/bv.aspx?from=de&to=en&a=http%3A%2F%2Fwww.wolframalpha.com%2F)

## "The future lies in meta search engines!"

Walter Karban, internet entrepreneur and CEO of inMotion Publisher, is the local search engine expert. In the mid-90s he developed the Austrian search engine "Austronaut". Info: [www.inmotion.at](http://www.microsofttranslator.com/bv.aspx?from=de&to=en&a=http%3A%2F%2Fwww.inmotion.at%2F)

**OCG-Journal: Was Wolfram Alpha overvalued?**

**Walter Karban:** Yes, but only because Wolfram Alpha has been presented as an alternative to Google. At that, this technology had to fail. Wolfram Alpha provides as a result scientifically-perceivable data, and so, for a small user group, it will bring the desired results in less time than any other search engine. To present it as a Google killer was wrong from the beginning.

**How do you rate the website of Wolfram Alpha personally?**

**Karban:** The simple structure was the central advantage of Google at its start 10 years ago. Logo and an input form on the welcome page and plausible results with a simple input. From this sight Wolfram Alpha has an extremely excessive text layout of the welcome page, which confuses in the first step from this point of view.

**Will Wolfram Alpha ever be a serious competitor to Google?**

**Karban:** No, it will remain a tool for a small, maybe growing, target group.

**Is "Bing" in the field of search engine technology better than Wolfram Alpha?**

**Karban:** Not better, but different. Bing is a mix of several search engine methods. Due to the cooperation between Bing and Wolfram Alpha new opportunities will occur. It remains to be seen, how results from Wolfram Alpha will affect the Bing search.

**Do you see a future in semantic search engines?**

**Karban:** Yes, because in my point of view semantic search offers the shortest way from an assumed term to a whole topic. Unfortunately the greatest difficulty for searchers is still the precise definition of the search terms.

**Which abilities must search engines have in the future to compete with Google?**

**Karban:** Wait, until the users realize that Google puts on its pants one leg at a time. Google's success is based on skillful marketing. The results of a search are only as good as the data base in combination with the entered keywords. Currently Google has the largest data base and the most user profiles and therefore the "perceived" most accurate results.

**Which search engine technology will prevail in the future?**

**Karban:** The data base is a fundamental requirement for good results. Considering the available information on the net, it is a large garbage dump. The challenge of searching the net is the diversity of the results and to narrow them down to the actually wanted. It needs a sophisticated definition of the search terms. The aim should be to get not too many, but accurate and also differentiated results. That is not accessible with a single search engine. I see the opportunity for meta-search engines, which combine the results of different search engines based on the result-rankings.