



AVIC
Description and Evolution



The A. V. I. C Project (Assistant Virtual Intelligent and Cooperative)

a cura di

Marco Pirrone

Massimo Romano



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1 The Problem: Too much Useless Information

Searching engines become an important tool in our virtual life. The challenge of the searching engines is to provide the best accurate results to the query in short time.

The user actual experience show that when a user is using the search engine he need constantly to manually refine his search in order to arrive to accurate results.

From above mentioned result the need, to have an instrument that privileges the individual, with his interests, his social relations and habits, in such a way as to provide the results closer to the user needs, rather than leaving it to huge amount of information and mechanisms used to classification of web pages.

2 A possible Solution: Share the Experience

Following to the mentioned above, Retis decide to develop software based on reasoning semantic techniques, which, together with a search engine allows to reorganize the results from the query executed on the search engine itself. This reorganization is based on preference (implicit and / or explicit) expressed by the persons which doing part of his network and defined as trust.

This application allows you to restructure the ranking associated with the results of a search based on the feedback (implicit and / or explicitly) by the users belonging to his entourage: the results considered valid by the trusted users are shown in the top positions of all total results. This means that the research reaches a high degree of customization: AVIC, which is a self-learner, learns build the search results considering the interests of the neighbors users and taking in account the inputs resulting from feedback of satisfaction expressed by these ones.

In this perspective, the project tries to find a partial solution in which the user assumes important rule trough it's own actions (rating, bookmarking, and so on).

In this way, a search does not remain a cold tool to query a web engine, but the same query results will be different according to the user and it's "friends social network" feedback.

Through AVIC, whenever you search for any information on the Internet the first results will be the pages that have already been appreciated by the trusted people, while those considered to be less related or interested will get lower ranking or position in the results list. The objective is to obtain positions in the first what is truly interesting and not the non-interesting results. For instance, searching information on "intelligence", it is possible to obtain first results related to "business intelligence" if the user is part of trusted social network which mainly populated by people which dealing with information technology sector, while if the user and it's related trust network deal with investigations,, AVIC will obtain before the results concerning the intelligence as a technique of investigation.

In fact, AVIC can be defines as intelligent search system that learns the behavior of the user, based on the trusted social network, and therefore the research become completely personalized. In substance, AVIC allows for searcher to share it's knowledge, increased confidence in their own social network.

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3 The Market

The advantage of a tool such as AVIC is highlighted in those contexts in which, in addition of having the need to have access to useful information in the shortest possible time, there is the possibility to show any link between users carrying out the research and use this link to improve the knowledge of the tastes and preferences of the user in question.

The system then acts in the same market of "search engines" which asks the user a profiling and authentication.

In addition to the general purpose application in the research field the system may also lead to large benefit in purely vertical applications.

3.1 In Vertical Sectors

The system can be adapt in vary sectors in order to improve the whole search results using company organization chart or business network, such as media, engineering, large organization where there is large information inside the corporate network.

3.2 In the Public Administration

Addressing various issues related to the System of Public Connectivity (SPC), the Code of Digital Administration (CAD), the Plan E-gov 2012, and maturing a strong experience in the context of cooperation Application within the P. A, we realize that, today, it is extremely necessary to have a set of shared information, accurate, valid and actually useful.

For this purpose it has become increasingly necessary to integrate, in the infrastructure of a P.A., a combination of systems able to analyze, classify, and rationalize the whole information assets usable by the citizen: this can be achieved through the combination of the search engines working on the content accessible to the citizen and AVIC.