Recommend an Ad Expert

Web- and social media-based expert profiling of digital marketing agencies

1. Context

A lot of companies, all over the world, start offering their services via the Web. This is also the case for digital marketing agencies, which offer online advertising campaigns for brands. These campaigns are typically targeted towards a particular customer segment. For example, when a brand of soft drinks wants to launch a new taste for one of their drinks, it needs to make a deliberate choice on the customers they want to sell their products to (e.g., men between 18 and 35 that like sporting). Consequently, this requires a tailored advertising campaign to reach these people.

Given the overwhelming international offer of digital marketing providers, brands are increasingly looking for tools that help them in this choice process. In the context of this thesis, you will be working on an *expert profiling and recommender system for digital marketing agencies* in collaboration with Sirris and a company that is developing software tools in this domain. This will involve gathering data on digital marketing agencies, assessing the quality, recency, and trustworthiness of this information, and rank the agencies according to the gathered parameters and the criteria as specified by the brand.

2. Objective

This thesis project is structured in 3 different steps:

1. The company providing this service currently crawls information on digital marketing agencies from the Web. In the first step, the goal is to make this crawling more intelligent, and use text mining techniques to extract different parameters on the digital marketing agency (e.g., type of advertising campaigns they offer, typical customers, supported media channels, etc.) from the data the company already has.
2. In the second step, the goal is to assess the quality of the collected data in terms of quality, recency (more recent information is deemed more valuable), and trustworthiness (e.g., likes by more influential people are more trustworthy). To this end, you will be provided with data on the social media profiles of the digital agencies, statistics on their website traffic, etc.
3. Provide a ranking based on the resulting information after step 2, and a recommendation based on the match with the criteria as outlined by the brand that wants to hire a digital marketing agency. (This step is optional and dependent on your interest and progress with the previous steps.)

Motivation to work on (big) data analytics for a real-world problem is implied, but no prior knowledge related to the domain of digital marketing is assumed. Programming

experience in Python (or a similar programming language) and interest in data mining (for Web, text and social media data) is a plus.

3. Information

Sirris is a non-profit and industry-driven knowledge center founded by Agoria, the federation of the Belgian technology industry. Sirris helps Belgian companies in the implementation of technological innovations, by providing companies with technological advice, by supporting companies in the definition and realization of innovation projects, and by setting up and participating in European R&D projects. Sirris is active in several domains, among which Software Engineering and ICT.