

I want to build a site providing personalized news which means for each registered user the site will show him/her the news that match his/her interests only.

I would like to use those content attributes:

- 1) General content category: technology, politics, entertainment, etc
- 2) Popular 3rd party news sites: BusinessInsider.com, TechHive.com, etc
- 3) Location preference: Worldwide, US only, other countries, etc

I would like to obtain user profiles in those ways:

- 1) When a person come to my site at the first time, he/she will be asked to choose some preferences from above attributes
- 2) The site will record user's search keyword each time and use this info to optimize profile
- 3) The site will record user's rating for each news and also use this info for profile optimization

Here are my solutions to deal with users who have different preferences at different times or in different situations (e.g., in the car vs. at home):

For users with different preferences at different times, I think the way 2 & 3 I propose above can solve it. I can analyze user's taste using his/her recent 10 searches and/or ratings to update the base profile. (E.g. A user like to read news about cloud computing in technology category, but recently he has searched for biotech development news many times. Thus in my recommendation system, I will increase the rank of biotech news and display them to that user.) For users in different situations (in the car or at home), I can provide news headline and/or compact news for the former users and full page and/or interactive news to the latter ones. This can be detected by adding a display preference and users can choose it by case.

I can improve my site when a user is unhappy with my update or correct their profile in this way:

Each time a user can close the news that he/she doesn't like and this feedback can also help improve recommendation system. And my site will not change user's base profile (general categories) and what I do is to precisely locate interesting news from those categories for users. Finally users have right to choose if enable recommendation or just search & browse news by him/herself.