



Profiles and Filters: Personalised News

Introduction

Newspapers provide their readers with a large amount of information about a variety of subjects. On a daily basis current affairs are published on paper-based media and distributed to the readers. Digitally distributed news is gaining in prominence and importance, and will gain even more. Because of the differences in media, readers are likely to have expectations dramatically different from paper-based newspapers. It is likely that the primary news source will shift to digital and reading paper-based news will be relegated to an easy chair, later at night or possibly only during weekends.

Newspapers must anticipate this development in order to survive. The hypothetical but realistic case described in his document illustrates a direction newspapers could go to provide services to their readers that will ease the transition to digital news services. The realism of the case stems from the fact that technology exists that could, even at a reasonable deployment cost, deliver the services described.

Background

Joe is marketing manager at an import/export company in the Netherlands, near Schiphol. Joe's main responsibilities are promotion and marketing his organizations expertise and services. Joe manages a team of seven account and relationship managers. His marketing efforts are geared towards suppliers as well as buyers. Joe's suppliers and buyers are both Dutch-based as well as international companies. His company is active globally, with specific focus on Eastern Europe and South-East Asia.

Privately, Joe has a typical Dutch interest, the 'defense against water'. This includes the history of polders, dikes, canals and particularly everything regarding the military inundation-based defense line and fortifications around Amsterdam, the so-called 'Stelling van Amsterdam'. Another, completely different interest of Joe is Jazz, specifically the somewhat esoteric.

His newspapers are an important source of information for his interests, both business and private.

Joes Personal News Service

At ten to eight Joe arrives at the office. He is one of the first to arrive. After connecting his laptop, he gets some coffee. Opening his mail, he waits for his new mail to arrive. He opens the message from his personalized news service. A few weeks ago Joe joined a pilot on personalized news. When signing up, Joe was able to specify three subjects on which he wants to be alerted. In the past weeks he has trained his news service on each of his personal subject categories by providing feedback on the alerts and adding specific examples of news items that he feels are of interest to him. The result is that the alerts now rarely contain unrelated items and that the news service also shows him information that he missed in the paper version. Training the news service clearly has resulted in more effective information.

You've got mail

The mail contains eleven items, classified by his subject categories. The first is an advertisement about the famous Bimhuis, in his Jazz category. Bimhuis organizes a

special happening. Kip Hanrahan will play. This item Joe missed while reading the paper version of his newspaper at breakfast. As he wants to be able to refer to it later, he adds the item to his personal archive: Advertisements are not stored in the newspapers digital archive. Too bad the advertisement doesn't contain a web link to allow him to order tickets right away. Another item in the Jazz category is about the slight increase in attendance at live performances.

Training and feedback

The category 'Stelling van Amsterdam' contains only one relevant item: the pumps of Lijnden have been re-instated after a serious overhaul. The second item is way off. A fairly large article on Dutch politics (about the 'Poldermodel') has been earmarked. 'Poldermodel' is the name that has been given to the dialogue in the Netherlands between representatives of the political system, the employers and employees. References to 'polder', 'rising water levels', 'flooding' are made in the item, but are meant figuratively, not literally. These references apparently misled the software during automatic analysis. To counter these effects, Joe selects a few passages in the item and drags them to an icon representing the subject classification. By dropping the text on the red icon, Joe trains his personal news service that related text should be excluded from this subject in his personal profile. However, a sidebar contains a literal description related to his subject. Joe selects the text in the sidebar and drops it on the green icon of his 'Stelling of Amsterdam' subject category. By doing this Joe provides feedback by adding to the training of his personal news service, making his training selection a little more specific and personalized.

The other items are related to businesses in the area. Business wise this is Joes most important category. He is referred to a new building permit of a Japanese company that he regularly does business with. They intend to build a European Logistics Center near Schiphol. He immediately sends an email to one of his relationship managers, requesting her to look into the impact of the logistics center. It could either mean they are set to do substantially more business with the Japanese partner or that they will loose all of their business with them. Another item is a reference to the 'Personnel Section'. He notices that a former employee of a partner, Mr. Hansen, has joined one of his Swiss business partners as a product manager. He is happy about that as the relationship with the Swiss partner is slowly eroding; this might be a chance to get the relationship back on track. The Personnel Section is not automatically available in the digital archive, so Joe clicks the button to add the news item to the archive he shares with his colleagues. He also adds a task to his diary to give Mr. Hansen a call.

Before closing the connection to his news service, Joe instructs the system to analyze his archives again. After about ten seconds the ranking within his archives change to reflect the training he has done. The news item about Dutch politics has been posted last and nearly disappeared from the list.

At half past eight his colleagues start coming into the office. Joe gets his second cup of coffee.

Postscript

This hypothetical case describes how an employee of a medium sized company can filter publicly available information, based on profiling or personalization. The profiles used can be created and maintained individually. The software that would allow such a personalized news service is available commercially and has been designed to allow effective access to unstructured text, whether contained in documents or web sites, internally or externally. Using advanced algorithms, the software is able to categorize, cluster and analyze text.