

Attribute Profiling Summary

The collaborative filtering industry has plateaued; stuck at version 1.0. It is akin to the web search industry before Google came along. That is it performs a function but it doesn't live up to its promise of providing real, meaningful recommendations. Attribute Profiling brings collaborative filtering to its full potential. Let me explain why...

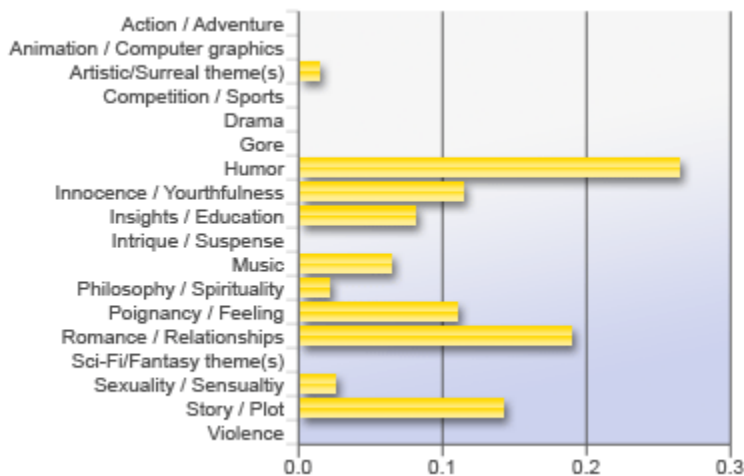
“Why” Attribute Profiling

The best explanation is to take an example. Let's assume you are going to recommend two products; one product to a dear friend and another to a complete stranger. Why is it so much easier to accurately recommend a product to your dear friend rather than the stranger? Of course the answer to this is obvious – you know your friend's likes and dislikes whereas you don't know the stranger at all. This simple example highlights the essence of Attribute Profiling and its eloquent and common-sense approach to collaborative filtering. That is, Attribute Profiling captures “why” someone likes or dislikes a product while, at the same time, seamlessly allows you to compare those preferences to products for an accurate recommendation. No other web 2.0 paradigm *explicitly* bridges the gap between users and products.


How it works

Attributes are first defined for a given product category, say movies, and then added to the website at the same location where the user would normally provide feedback. At this point the user would check off the Attributes he liked or disliked about the product (image at right). This gives us two things in one step: Information on why the user likes a product *and* a description of the product itself.

A running total is stored for each Attribute that was checked for both the user and product. After many Attribute Profile submissions are made – either by one user rating many products or many users rating the same product – an Attribute Profile for every user and product emerges (Image below shows a possible Attribute Profile for the movie *Groundhog's Day*).



Attribute Profiling Component Sample



Groundhog's Day

★★★★☆

Please tell us why you liked/disliked this movie

I liked this movie's...

I disliked this movie's...

<input type="checkbox"/>	Action / Adventure	<input type="checkbox"/>
<input type="checkbox"/>	Animation / Computer graphics	<input type="checkbox"/>
<input type="checkbox"/>	Artistic/Surreal theme(s)	<input type="checkbox"/>
<input type="checkbox"/>	Competition / Sports	<input type="checkbox"/>
<input type="checkbox"/>	Drama	<input type="checkbox"/>
<input type="checkbox"/>	Gore	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Humor	<input type="checkbox"/>
<input type="checkbox"/>	Innocence / Youthfulness	<input type="checkbox"/>
<input type="checkbox"/>	Insights / Education	<input type="checkbox"/>
<input type="checkbox"/>	Intrigue / Suspense	<input type="checkbox"/>
<input type="checkbox"/>	Music	<input type="checkbox"/>
<input type="checkbox"/>	Philosophy / Spirituality	<input type="checkbox"/>
<input type="checkbox"/>	Poignancy / Feeling	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Romance / Relationships	<input type="checkbox"/>
<input type="checkbox"/>	Sci-Fi/Fantasy theme(s)	<input type="checkbox"/>
<input type="checkbox"/>	Sexuality / Sensuality	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Story / Plot	<input type="checkbox"/>
<input type="checkbox"/>	Violence	<input type="checkbox"/>

Submit Your Opinion

An Attribute Profile then becomes a user's or product's “fingerprint”. Since both users and products share the same Attributes it is just a matter of “matching fingerprints” (according to what the user likes) to find an accurate product recommendation.

Recommendations and beyond

From this simple foundation many more possibilities appear. Not only is a company able to leverage their existing collaborative filtering algorithms but they can utilize their existing data structures as well, such as genre, to create genre-specific Attribute Profiles. Attribute Profiling also allows user profiles to evolve as user's change their tastes; offers users a more detailed product description than was previously possible and provides more informative product rating paradigms to name just a few features. Collaborative filtering 2.0 has arrived. To learn more please visit our website at <http://www.egretendeavors.com>.