

Critique-Based Recommenders (CBR)

- Simulate salespersons
- No need to specify all the preferences
- No need to rate a set of previously experienced products

Small User Effort

- Elicit users feedback to improve accuracy
- From a set of critiques: "I like something cheaper"

Research Goal

CBR is extremely efficient for high-involvement products:

- Consumers spend a significant amount of time in choosing the product
- Consumers rely on their own judgment when the risk is high

How to adapt CBR to public taste products?

Critiquing Recommenders for Public Taste Products *

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Editorial Picked Critiques (EPC)

A new algorithm combining:

- Editorial opinions
- Popularity information
- Critiques automatically generated by data mining techniques

Comparative User Study

Application domain: Online perfume shop

- Typical public taste goods
- People frequently buy perfumes
- Complex in terms of number of features

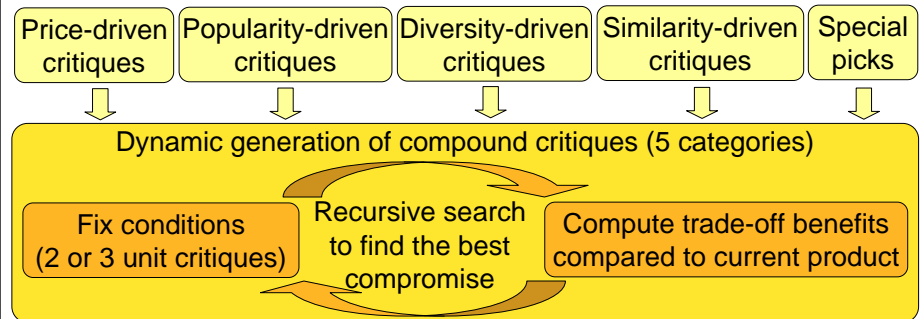
In order to measure users' satisfaction:

- **Interface A:** newly developed EPC
- **Interface B:** generalized version of both dynamic and preference based critiquing
- 12 evaluation questions

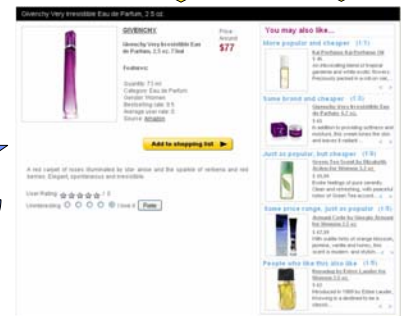
♂ 11 ♀ 11 22 users (online & in-lab)

EPC Architecture

Unit critique categories in a top down order

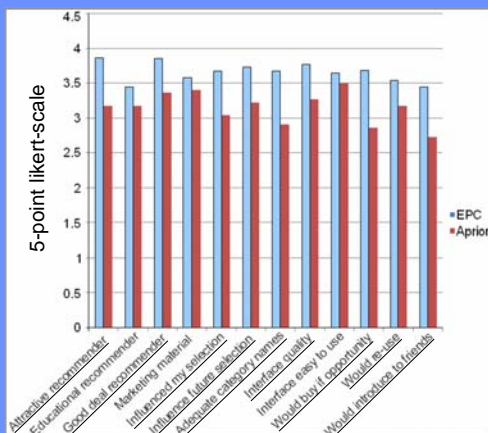


Human Computer Interactions



Select products from one of the five categories

Results



Conclusion

- EPC is **better in all of the 12 dimensions** (9 p-values < 0.05)

EPC is 2.42 times more preferred than general CBR

EPC is 21% more attractive
EPC provides 29% more confidence for purchase

- EPC significantly improves the quality of recommendations both in terms of content and ease of use
- EPC overcomes limitations for public taste products
- This new approach matches with the need for popularity information, editorial suggestions, and need for personalization

* See also "Recommenders' Influence on Buyers' Decision Process" in the same conference proceedings