

Personalisation

To what extent should users give up control of their interaction in favour of depending on intelligent “agents”?

automation vs. direct manipulation

Twenty years ago, knowledgeable sellers were available in shops to advise and inform people about products. What is available today, now that shops are online?

Search & Browse

direct manipulation

- First online shops provided categories to be browsed
- Search tools rapidly followed, allowing to target items more precisely

Explicit Ratings

current recommender systems

- Today’s recommenders rely on explicitly expressed ratings of items

Behavioural Recommenders

automation

- Current research explores indirect ways for users to express preferences
- Past purchases, repeated uses, reading time, decisive actions, ...

How Users Perceive and Appraise Personalised Recommendation Systems

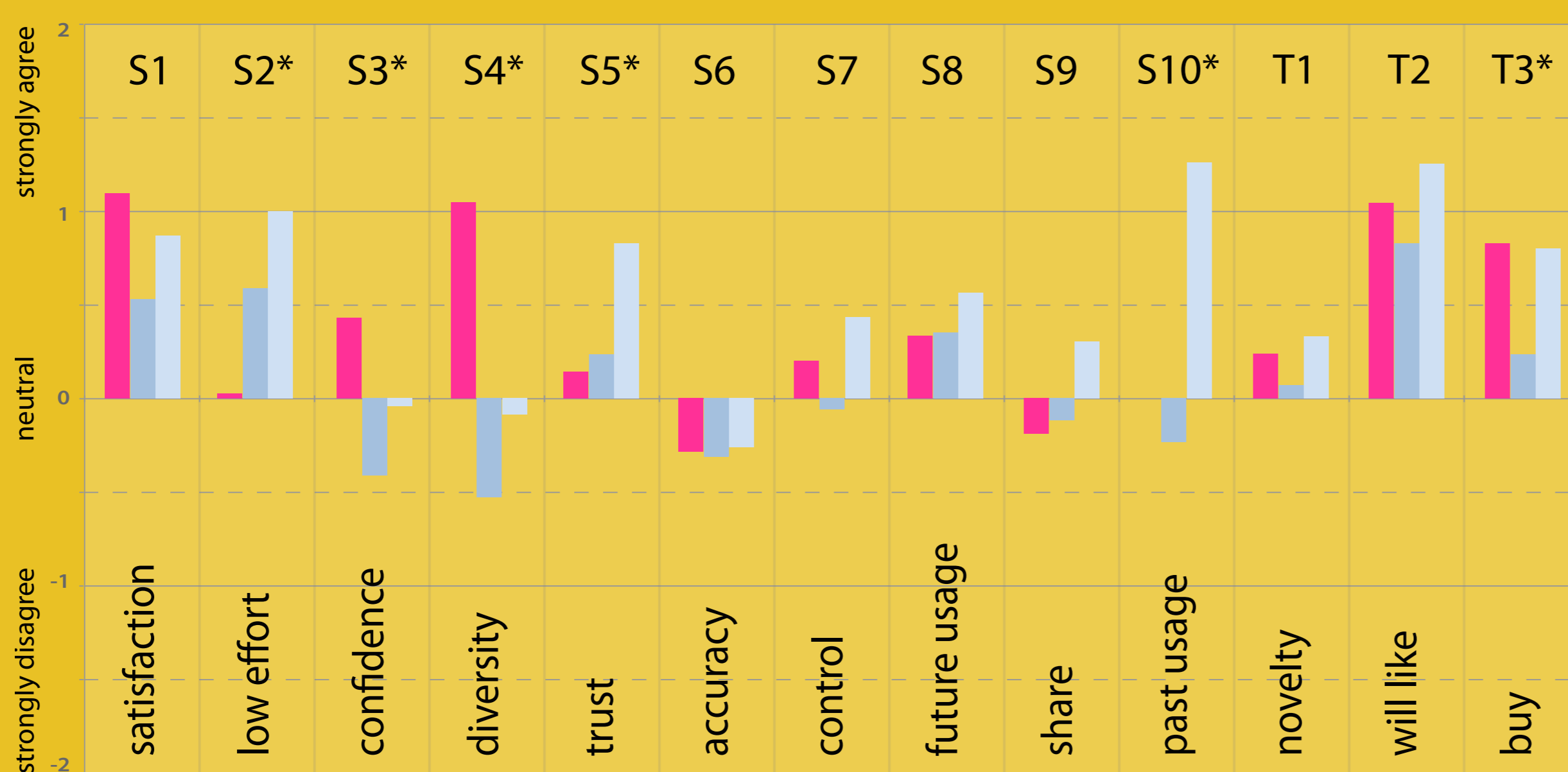
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Results of Post-Study Assessment

- Baseline, search & browse
- Small profile recommendations (<20 books)
- Big profile recommendations (+20 books)
- * significant at the 0.05 level



Conclusions

- **H1 & H2:** accuracy is perceived equally by all users; dimensions like confidence & diversity show the expected trend.
- **H3:** behavioural recommendations benefit users for trust and low effort.
- Both mechanisms provide similar overall satisfaction.

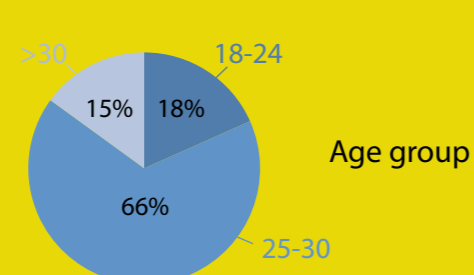
Search & Browse

more diversity & choice confidence

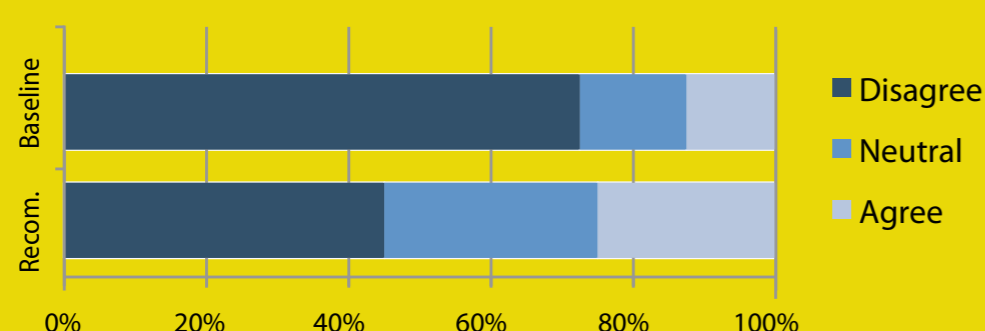
Behavioural Recommender

less effort required & not trustful

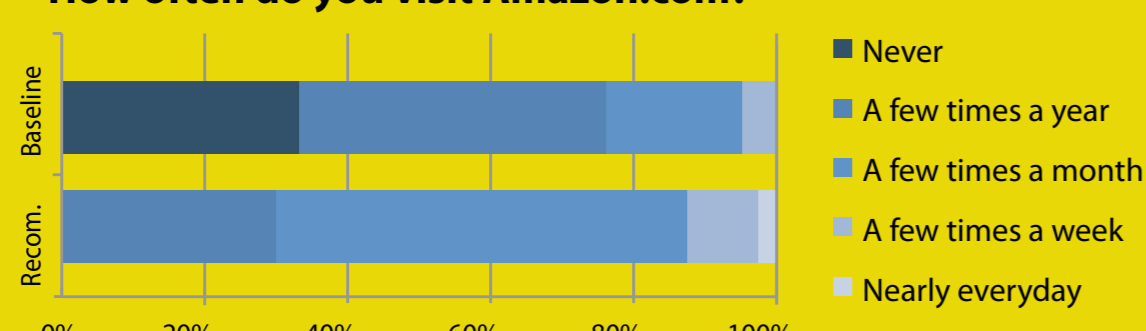
Participants' Profile



I read a lot of books:



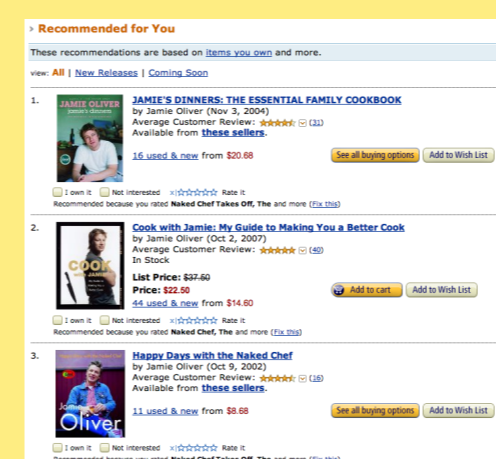
How often do you visit Amazon.com?



Experiment Setup

Goal: to find five books to buy on Amazon.com's book shop.

- 20 people used the traditional search & browse as our *baseline* for direct manipulation.
- 2x20 other users navigated through *recommendations* generated from their past purchase history.



Hypotheses

- H1:** search & browse will provide higher recommendation accuracy for users with a small profile size.
- H2:** there exists a profile size as of which a behavioural recommender proposes a better accuracy than search & browse.
- H3:** on average, users are likely to significantly benefit from behavioural recommendations.