

# How much to personalize?

## The 5 Do's and the 5 Don't's of Personalization

PersDB09@VLDB panel

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## *The 5 Do's and the 5 Don't's of Personalization*

### My background

For the past 3-4 years worked on preference models and how to integrate user preferences along with other forms of relevance ranking in query answering

- Context-dependent preference model (location among others) [ICDE07, EDBT08]
- Qualitative preference models along
  - Keyword queries
  - Ranked information dissemination [DEBS09]

### My 5 minutes

**Rules** of what to do and not do when it comes to personalization



## *The 5 Do's and the 5 Don't's of Personalization*

### Do #1: Personalize when there is "best-effort" semantics involved

Personalization is useful when

- There are too much data, too many users, choices
- Limited resources (space and time)

**Optimization problem:** maximize relevance given a set of constraints



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### Do #2: Go beyond relevance

Beyond predicted relevance, user satisfaction:

- Diversity (eg overlap)
- Coverage



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### **Do #3: EXPLAIN: Provide some justification about the result**

It is easier to judge positively a search result/recommendation/query ranking when there is some explanation of its derivation

Why this is good for them

“people which bough this ... also bought this”

highlighted matched search terms in search engine snippet

the deduction steps



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### Do #4: Build trust

People may be skeptical/reluctant especially in terms of **privacy**



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### **Do #5: ADJUST: be dynamic and adaptive**

Interests, trends change -> able to follow

E.g., monitor, use feedback



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### Don't #1: Don't be overlay proactive

Too much advertisements, too many recommendations, etc

It is annoying!



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### **Don't #2: Do not be too specific - leave space for the unknown**

In general, people prefer things they know

Difficulty to differentiate between “I do not like A” – “I do not know whether I like A” – “I do not know A exists”

Automatic (preference learning/ mining – recommendation: new users or items)

Add some “random” choices



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### Don't #3: Don't over-generalize

It is difficult to predict – many factors affect preferences



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### Don't #4: Don't add too many features

Or KISS (Keep It Simple Stupid)

The associated effort by the user should be kept at a minimum

- Setting tuning parameters
- Expressing preferences
- Providing feedback



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### Don't #5: Do not trust the user

“Everybody lies”

Sometimes unintentionally



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### Personalization is a fact of life

"Welcome to the world. Everyone's different, everyone gets treated different. You try fighting that, you end up dying of TB." [1]

*Thank You*

[1] Dr House, House MD, Episode #204

