**THE IMPACT OF SEMANTIC CONTEXT CUES ON THE USER ACCEPTANCE OF TAG RECOMMENDATIONS: AN ONLINE STUDY**

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**MOTIVATION**

- Tag recommendations support users in finding tags for bookmarks
- Large body of offline evaluation studies, which measure prediction accuracy rather than “real user acceptance”
- Three factors are especially important: 1. frequency, 2. recency (narrow & broad folksonomies), and 3. semantic context (broad folksonomies)
- This study has two goals:
  1. Contribute to the sparse line of online evaluation results
  2. Test hypothesis: semantic context cues have a higher impact on user acceptance in collaborative than individual settings

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**KnowBrain: Collecting and Tagging Resources**

KnowBrain (a) provides a social tagging interface (b) to collect Web resources (no. 1), classify them by choosing from a list of pre-defined categories / context cues (no. 2), receive a set of recommended tags (no. 3), and choose (no. 4) / add tags (no. 5).

[Online under: https://github.com/learning-layers/KnowBrain]

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**Method**

- Compare context-unware algorithm *MostPop* with context-aware algorithm *3Layers* (using categories)
- *MostPop* recommends the overall most frequently used tags and *3Layers* is based on human categorization model MINERVA2 (see illustration)
- To test: Acceptance of *3Layers* > *MostPop* in collaborative setting but no difference in individual one

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**Study Design & Data**

- Work-integrated bookmarking scenario: 17 university employees bookmarked resources for 4 weeks (topic: designing workplaces)
- They were split into 2 groups (individual & collaborative) and supported with tag recommendations (random choice of *MostPop* & *3Layers*)

<table>
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<th>[B]</th>
<th>[MP]</th>
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**Journal & Framework**


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**Results: User Acceptance of Tag Recommendations**

In line with our hypothesis, there is a significant difference between *3Layers* and *MostPop* in the collaborative setting (p < 0.05) but no difference in the individual one.


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https://github.com/learning-layers/TagRec/