User Feedback as a First Class Citizen in Information Integration Systems

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1. Summary
   As explicitly stated in the title, this paper presented the advantages of treating user feedback as the first class citizen in the information integration systems. Compared with existing proposals in this area that only deal with specific type of user feedback and often only single user, the information integration systems proposed in this paper is capable of processing several different kinds of feedback that can come from multiple users with various expectations. Besides, the authors drafted some possible solutions for implementation and a research agenda.

2. Positive
   a. They presented concrete examples to consolidate their argument that it's advantageous to manage user feedback as a first class citizen in information systems.
   b. By their methodology, it can provide single consistent representation of feedback and offer maximum use of limited feedback available.
   c. They explored several options to ensure cohesion such as checking feedback consistency of different users and clustering users in terms of their feedback, etc. The latter approach is also beneficial in discovering outliers and optimizing the structure of information integration systems.

3. Negative/Potential extensions and improvements
   a. In the section of learning feedback using collaborative filtering, the results produced is likely to be misleading or wrong if the feedback is sparse. For example, the set of objects annotated by more than one feedback instance is small. They didn't have a clear and effective solution.
   b. Although they offer certain cases of feedback validity, given the complicated real-world cases, it's not exhaustive for sure.
   c. Feedbacks cannot offer full knowledge of requirements of users. Therefore, there exist uncertainties in the results produced by the operations.

4. Research Questions and Points for Discussion
   a. Scarce feedback: In this situation, it would be difficult to check the validity of feedback or predict users' annotation with collaborative filtering correctly.
   b. How to compare and user different kinds of feedbacks offered on artifacts?