Proceedings of the

RecSys 2012

Workshop on

Human Decision Making in Recommender Systems

(Decisions@RecSys’12)

In conjunction with the

6th ACM Conference on Recommender Systems

September 9-13, 2012, Dublin, Ireland
Preface

Interacting with a recommender system means to take different decisions such as selecting a song/movie from a recommendation list, selecting specific feature values (e.g., camera’s size, zoom) as criteria, selecting feedback features to be critiqued in a critiquing based recommendation session, or selecting a repair proposal for inconsistent user preferences when interacting with a knowledge-based recommender. In all these scenarios, users have to solve a decision task.

The complexity of decision tasks, limited cognitive resources of users, and the tendency to keep the overall decision effort as low as possible lead to the phenomenon of bounded rationality, i.e., users exploit decision heuristics rather than trying to take an optimal decision. Furthermore, preferences of users will likely change throughout a recommendation session, i.e., preferences are constructed in a specific decision environment and users do not know their preferences beforehand.

Decision making under bounded rationality is a door opener for different types of non-conscious influences on the decision behavior of a user. Theories from decision psychology and cognitive psychology are trying to explain these influences, for example, decoy effects and defaults can trigger significant shifts in item selection probabilities; in group decision scenarios, the visibility of the preferences of other group members can have a significant impact on the final group decision.

The major goal of this workshop was to establish a platform for industry and academia to present and discuss new ideas and research results that are related to the topic of human decision making in recommender systems. The workshop consisted of technical sessions in which results of ongoing research as reported in these proceedings were presented, a keynote talk given by Joseph A. Konstan on “Decision-Making and Recommender Systems: Failures, Successes, and Research Directions” and a wrap up session chaired by Alexander Felfernig.

Marco de Gemmis, Alexander Felfernig, Pasquale Lops, Francesco Ricci, Giovanni Semeraro and Martijn Willemsen

September 2012
Workshop Committee

Workshop Co-Chairs

Marco de Gemmis, University of Bari Aldo Moro, Italy
Alexander Felfernig, Graz University of Technology, Austria
Pasquale Lops, University of Bari Aldo Moro, Italy
Francesco Ricci, University of Bozen-Bolzano, Italy
Giovanni Semeraro, University of Bari Aldo Moro, Italy
Martijn Willemsen, Eindhoven University of Technology, Netherlands

Organization

Monika Mandl, Graz University of Technology
Gerald Ninaus, Graz University of Technology

Program Committee

Robin Burke, DePaul University, USA
Li Chen, Hong Kong Baptist University, China
Marco De Gemmis, University of Bari Aldo Moro, Italy
Benedict Dellaert, Erasmus University Rotterdam, Netherlands
Alexander Felfernig, Graz University of Technology, Austria
Gerhard Friedrich, University of Klagenfurt, Austria
Sergiu Gordea, Austrian Institute for Technology, Austria
Andreas Holzinger, Medical University Graz, Austria
Dietmar Jannach, University of Dortmund, Germany
Bart Knijnenburg, University of California, USA
Alfred Kobsa, University of California, USA
Gerhard Leitner, University of Klagenfurt, Austria
Pasquale Lops, University of Bari Aldo Moro, Italy
Walid Maalej, Technische Universität München, Germany
Monika Mandl, Graz University of Technology, Austria
Alexandros Nanopoulos, University of Hildesheim, Germany
Francesco Ricci, University of Bolzano, Italy
Olga C. Santos, UNED, Spain
Giovanni Semeraro, University of Bari Aldo Moro, Italy
Erich Teppan, University of Klagenfurt, Austria
Marc Torrens, Strands, Spain
Martijn Willemsen, Eindhoven University of Technology, Netherlands
Markus Zanker, University of Klagenfurt, Austria
Table of Contents

Decision-Making in Recommender Systems: The Role of User’s Goals and Bounded Resources
P. Cremonesi, A. Donatacci, F. Garzotto, R. Turrin  
1

Enhancement of the Neutrality in Recommendation
T. Kamishima, S. Akaho, H. Asoh, J. Sakuma  
8

The Effect of Sensitivity Analysis on the Usage of Recommender Systems
M. Maida, K. Maier, N. Obwegeser, V. Stix  
15

Recommending Personalized Query Revisions
H. Blanco, F. Ricci, D. Bridge  
19

Eliciting Stakeholder Preferences for Requirements Prioritization
A. Felfernig, G. Ninaus, F. Reinfrank  
27

Recommendation Systems in the Scope of Opinion Formation: a Model
M. Blattner, M. Medo  
32

Effects of Online Recommendations on Consumers' Willingness to Pay
G. Adomavicius, J. Bockstedt, S. Curley, J. Zhang  
40

Copyright © 2012 for the individual papers by the papers' authors. Copying permitted for private and academic purposes. This volume is published and copyrighted by its editors.