User Modeling in Exploratory Search

Ilkka Kiistala
Department of Computer Science,
University of Helsinki
P.O. Box 68 (Gustaf Hällströmin katu 2b)
FI-00014 UNIVERSITY OF HELSINKI
FINLAND

Tuire Peurala
Department of Computer Science,
University of Helsinki
P.O. Box 68 (Gustaf Hällströmin katu 2b)
FI-00014 UNIVERSITY OF HELSINKI
FINLAND

ABSTRACT
This is abstract.

Author Keywords
Exploratory Search; Information Retrieval; User Modeling.

ACM Classification Keywords
H.5.m. Information Interfaces and Presentation (e.g. HCI): Miscellaneous

General Terms
Human Factors; Design; Measurement.

INTRODUCTION
This is the introduction.

USER MODELING
Shortish explanation of user modeling key concepts. [14], [5]

Sterotypes
Modeling stereotypes. [3], [13]

How to Collect and Analyze User Information
[12], [17]

Personalization
Individualization of user models, Adaptive/Adaptable User Interfaces, intelligent user interfaces [2], [4], [1]

EXPLORATORY SEARCH IS A SUBTOPIC OF INFORMATION RETRIEVAL

Information retrieval
There are many goals in information retrieval and exploratory search is one of them. [6], [7]

Exploratory Search
Introduction to exploratory search. [10], [20], [16]

USER MODELING IN EXPLORATORY SEARCH
How has user modeling been used in supporting exploratory search, example cases? What challenges have emerged? [11], [15], [18], [8]

Evaluation of Exploratory Search Systems
What are the challenges in evaluating Exploratory Search Systems? [19], [9]

CONCLUSION
Here are the conclusions.

WHO ADDED WHAT REFERENCES?
[14] Tuire
[5] Tuire
[3] Tuire
[13] Tuire
[12] Ilkka
[17] Ilkka
[2] Ilkka
[4] Ilkka
[1] Ilkka
[6] Tuire
[7] Tuire
[10] Tuire
[20] Ilkka
[16] Ilkka
[11] Tuire
[15] Tuire
[18] Ilkka
[8] Tuire
[19] Ilkka
[9] Ilkka

Reference count

Author	Tuire	Ilkka
References added	10	10

REFERENCES
1. Brusilovsky, P. Methods and techniques of adaptive hypermedia. *User Modelling and User-Adapted Interaction 6*, 2-3 (1996), 87–129. Cited By (since 1996): 577.
2. Bunt, A., Conati, C., and McGrenere, J. What role can adaptive support play in an adaptable system? In *Proceedings of the 9th international conference on Intelligent user interfaces*, ACM (2004), 117–124.

3. Dillon, A., and Watson, C. User analysis in hci the historical lessons from individual differences research. *International Journal of Human-Computer Studies 45*, 6 (12 1996), 619–637.

4. Findlater, L., and McGrenere, J. A comparison of static, adaptive, and adaptable menus. In *Proceedings of the SIGCHI conference on Human factors in computing systems*, ACM (2004), 89–96.

5. Fischer, G. User modeling in human–computer interaction. *User modeling and user-adapted interaction 11*, 1-2 (2001), 65–86.

6. Hearst, M., Elliott, A., English, J., Sinha, R., Swearingen, K., and Yee, K.-P. Finding the flow in website search. *Communications of the ACM 45*, 9 (2002), 42–49. cited By (since 1996) 110.

7. Kuhlthau, C. C. Inside the search process: Information seeking from the user's perspective. *JASIS 42*, 5 (1991), 361–371.

8. Kules, B., Capra, R., Banta, M., and Sierra, T. What do exploratory searchers look at in a faceted search interface? In *Proceedings of the ACM/IEEE Joint Conference on Digital Libraries* (2009), 313–322. Cited By (since 1996): 22.

9. Kules, B., and Shneiderman, B. Users can change their web search tactics: Design guidelines for categorized overviews. *Information Processing and Management 44*, 2 (2008), 463–484. Cited By (since 1996): 27.

10. Marchionini, G. Exploratory search: From finding to understanding. vol. 49, Affiliation: School of Information and Library Science, University of North Carolina, Chapel Hill, United States (2006), 41–46. Cited By (since 1996): 260.

11. OĆonnor, B., Krieger, M., and Ahn, D. Tweetmotif: Exploratory search and topic summarization for twitter. *Proceedings of ICWSM* (2010), 2–3.

12. Pazzani, M., and Billsus, D. Learning and revising user profiles: The identification of interesting web sites. *Machine Learning 27*, 3 (1997), 313–331. Cited By (since 1996): 419.

13. Pu, H. ., Chuang, S. ., and Yang, C. Subject categorization of query terms for exploring web users' search interests. *Journal of the American Society for Information Science and Technology 53*, 8 (2002), 617–630. Cited By (since 1996): 62.

14. Rich, E. Users are individuals: individualizing user models. *International Journal of Human-Computer Studies 51*, 2 (8 1999), 323–338.

15. Sugiyama, K., Hatano, K., and Yoshikawa, M. Adaptive web search based on user profile constructed without any effort from users. Affiliation: Nara Institute of Science and Technology, 8916-5 Takayama, Ikoma, Nara 630-0192, Japan; Affiliation: Nagoya University, Chikusa, Nagoya, Aichi 464-8601, Japan; Affiliation: Hitachi, Ltd., Software Division, Japan (2004), 675–684. Cited By (since 1996): 165.

16. Tvarožek, M. Exploratory search in the adaptive social semantic web. *Information Sciences and Technologies Bulletin of the ACM Slovakia 3*, 1 (2011), 42–51.

17. White, R. W., Bennett, P. N., and Dumais, S. T. Predicting short-term interests using activity-based search context. In *Proceedings of the 19th ACM international conference on Information and knowledge management*, ACM (2010), 1009–1018.

18. White, R. W., Drucker, S. M., Marchionini, G., Hearst, M., and Schraefel, M. C. Exploratory search and hci: Designing and evaluating interfaces to support exploratory search interaction. In *Conference on Human Factors in Computing Systems - Proceedings* (2007), 2877–2880. Cited By (since 1996): 3.

19. White, R. W., Marchionini, G., and Muresan, G. Evaluating exploratory search systems. introduction to special topic issue of information processing and management. *Information Processing and Management 44*, 2 (2008), 433–436.

20. White, R. W., and Roth, R. A. Exploratory search: Beyond the query-response paradigm. *Synthesis Lectures on Information Concepts, Retrieval, and Services 1*, 1 (2009), 1–98.