Abstract

The main purpose of recommender systems is to assist consumers find products and services they are interested in. When having already purchased one product, it is likely that the consumer may look for complementary products to the bought one. This paper proposes an Analytic Hierarchy Process (AHP) based model to help customers find the best complementary products. The selection of the best products is done according to certain criteria, which are evaluated and ranked in order to determine the criteria that drives one customer to cross sell.

References

An AHP-based Model for Selecting Complementary Products

- V. Kumar, M. George, and J. Pancras, "Cross-buying in retailing: Drivers and
- W. J. Reinartz and V. Kumar, "The Impact of Customer Relationship
2003.
- S. Netessine, S. Savin, and W. Xiao, "Revenue Management Through Dynamic
2006.
- H. Baumgartner and J. -B. E. M. Steenkamp, "Exploratory consumer buying
121–137, Apr. 1996.
- S. Patel and A. Schlijper, "Models of consumer behaviour," 49th Eur. Study
- A. Aribarg and N. Z. Foutz, "Category-Based Screening in Choice of
- E. Bottani and A. Rizzi, "An adapted multi-criteria approach to suppliers and
products selection—An application oriented to lead-time reduction," Int. J. Prod. Econ.,
- Nadja Kasperczyk and Karlheinz Knickel, "The Analytic Hierarchy Process
(AHP)," pp. 1–6.
- J. Ball and V. C. Srinivasan, "Using the Analytic Hierarchy Process in house
02, no. 02, pp. 139–144, 2010.
- R. W. Saaty, "The analytic hierarchy process—what it is and how it is used," Math.
- O. S. Vaidya and S. Kumar, "Analytic hierarchy process: An overview of
- W. Ho, X. Xu, and P. K. Dey, "Multi-criteria decision making approaches for
1, pp. 16–24, Apr. 2010.
- Betül Özkan, Hüseyin Ba?gil, and Nergis ?ahin, "Supplier Selection Using
Analytic Hierarchy Process: An Application From Turkey," presented at the The World
Congress on Engineering, 2011.
- Y. Wind and T. L. Saaty, "Marketing Applications of the Analytic Hierarchy
- E. Dunn, E. F. D. and J. (Yoram) Wind, and J. Wind, Analytic Hierarchy Process for
- R. G. Schwartz and S. S. Oren, "Using analytic hierarchies for consumer
University, 2008.
Index Terms

Computer Science

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Keywords

Recommendation system; decision criteria; cross-sell; Analytic Hierarchy Process.