Abstract

The ever increasing scale of e-commerce has today presented a big range of choice for the customer. Customer uses online product reviews as a primary criterion to make a decision for his purchase. These product reviews are scattered all around the internet, and this data has a great potential value. However, it is also unstructured and written in a natural language, which poses great problems for data mining and data analytics. The scale, non-uniformity and complexity of product reviews make them classic big data elements. This paper discusses the big data challenges and opportunities involved in mining and analytics of product review data. It formally studies the problem under a big data framework and formulates a plan for the extraction, mining and analysis. This paper also reviews some of the mining approaches for product reviews and implemented feature/attributes based method for finding the review of products.

References


18. Ding, L., Tim Finin, Anupam Joshi, Rong Pan, R. Scott Cost, Joel Sachs, Vishal Doshi, Pavan Reddivari, and Yun Peng, Swoogle: A Search and Metadata Engine for the Semantic
Web, Thirteenth ACM Conference on Information and Knowledge Management (CIKM'04),

20. Mohd Wazih Ahmed, Dr. M. A. Ansari "A survey: Soft computing in Intelligent
Information Retrieval Systems," International Conference on Computational Science and Its
Applications, IEEE 2012

21. S. Kalaivani, K. Duraiswamy, "Comparison of Question Answering Systems Based on
Ontology and Semantic Web in Different Environment", Journal of Computer Science 8 (9):
1407-1413, 2012

Web Documents", (IJACSA) International Journal of Advanced Computer Science and
Applications, 9, 2011

23. Jianguo Jiang, Zhongxu Wang, Chunyan Liu, Zhiwen Tan, Xiaoze Chen, Min Li “The
Technology of Intelligent Information Retrieval Based on the Semantic Web” 2nd International
Conference on Signal Processing Systems (ICSPS), IEEE 2010

24. Nicholas J. Belkin “Intelligent Information Retrieval: Whose Intelligence,” Department of
Information Studies, University of Tampere

25. LIU Yong-Min, CHENG Shu “Artificial Intelligent Information Retrieval Using Assigning
Context of Documents,” International Conference on Networks Security, Wireless
Communications and Trusted Computing, IEEE 2009

26. Wenjie Li, Xiaohuan Zhang, Xiaofei Wei, “Semantic Web-Oriented Intelligent Information
Retrieval System,” International Conference on BioMedical Engineering and Informatics, IEEE
2008

27. Yi Xiao, Ming Xiao, Fan Jhang “Intelligent Information Retrieval Model Based on
Multi-Agents,”, IEEE 2007

System Based on Ontology” The Eighth International Conference on Electronic Measurement
and Instruments, IEEE 2007

29. Tanveer J. Siddiqui, U. S. Tiwary “Integrating Notion of Agency and Semantic in
Information Retrieval multi-agent model”, Proceeding of the 2005 5th International Conference
on Intelligent Systems Design and Applications(ISDA’05) , IEEE 2005


Index Terms

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