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.


13. Qi Zhang, Yuanbin Wu, Tao Li, Mitsunori Ogihara, Joseph Johnson, Xuanjing Huang,"Mining Product Reviews Based on Shallow Dependency Parsing", SIGIR ’09, Proceedings of the 32nd international ACM SIGIR conference on Research and development in information retrieval, 2009


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
Challenges for Information Retrieval in Big data: Product Review Context

Web, Thirteenth ACM Conference on Information and Knowledge Management (CIKM'04), Washington DC, November 2004.


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


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


**Index Terms**

Computer Science

Information Systems

**Keywords**

Big Data; Information Retrieval; Data Mining; Product Reviews; Text Mining; Sentiment Classification; e-commerce;