

# **Mining social network content of online retail brands: An exploration of engagement, sentiment analysis and topic modelling**

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## **Abstract**

Social media networks such as Facebook and Twitter have become vital and is a-must by businesses nowadays. Social media covers a wide spectrum of users and facilitates businesses in their operations by providing various services and interact with customers. As a result, a large amount of social media content is created and freely available on social media sites. In order to understand customers better, companies use this opportunity to monitor and analyse user-generated content related to their interactions, performances and at the same time provide comprehensive views on other competitors. In an effort to help companies understand how to perform social media analysis and transform the data into meaningful knowledge, this paper examines user-generated unstructured content on Twitter and Facebook sites of the three leading UK online retailers: Amazon, Asda and Tesco. Our analysis shows how topics, engagement, sentiment analysis of these data could be turn into knowledge, source of intelligence and useful for companies to improve businesses. We believe that the study of customer behaviours and interactions on social media site has its potential to extract valuable knowledge and pattern that can be beneficial to develop effective marketing strategies. The results will be discussed and implications will be drawn.

## **Keywords**

Social media, data mining, engagement, sentiment analysis, topic model

## **Biography**

**Noor Farizah Ibrahim** is a doctoral student in School of Economics, Finance and Management at the University of Bristol. Her research interests include social media, big data, social network analysis, online community engagement, natural language processing, machine learning, information system and technology management.

**Dr. Xiaojun Wang** is Reader in Operation Management in School of Economics, Finance and Management, University of Bristol. His current research predominantly focuses on supply chain risk and resilience, low carbon manufacturing, eco-design, sustainability, and social media research. His research outputs have been published in many international journals including *Production and Operations Management*, *European Journal of Operational Research*, *Omega*, *International Journal of Production Economics*, *International Journal of Production Research*, and *Journal of the Operational Research Society*. He is currently working on several research projects funded by a range of funding bodies including NERC, ESRC, the Royal Society, the Newton Fund, and the National Natural Science Foundation of China (NSFC).