

# Identifying Development Focus and Trend of Blockchain Industry through TMT Media Articles: A topic modeling and Sentiment Analysis investigation

*Completed Research Paper*

WU, Jun, SHAO, Dan-rui ,GUO, Jia-hang and CHENG, Yao

## **Abstract**

*Driven by technology and capital markets, the development of blockchain in China has experienced great fluctuations in the past two years. How to identify the development focus and trend of blockchain industry has attracted more and more attention from academics and practitioners. 2951 blockchain news collected from China famous TMT media — 36kr.com was analyzed using structural topic modeling and deep learning enhanced sentiment analysis. This paper reveals that: (1) blockchain industry development in China in the past 2 years can be reflected by 7 key topics which focus on the bitcoin and its initial offering, digital currency trade and blockchain technology applications. (2) Although positive sentiment tendency dominated during the period of 2014 to April 2018 for the blockchain articles in 36kr.com, since January 2017, the sentiment of articles related to the issuance and trading of digital currency has clearly shifted from positive to negative, implying concerns about speculation in the encrypted digital currency market. The contribution of this paper is reflected not only by proposing a new approach to identify the development focus and trend of emerging technology but also validating its application in the data driven industry monitoring.*

**Keywords:** Blockchain, Industry trend, Structural topic modeling, Sentiment analysis