

Abstract

COVID-19 has led to a surge of electronic information as it becomes a pandemic by March, and electronic devices being consumed more than ever before. This surge had led a question amongst the quality of its response through the news media and government. An infoveillance study was conducted towards Indonesia, Singapore, and the United States government and news media to examine news media and government response using 22 youtube channel content that was broadcasted using local-aired television during January-March 2020. The 22 channels observed were manually scrapped for its title, description, subtitle, and publication date, then labeled accordingly to which region they belong. COVID-19 cases repositories from John Hopkins were added as an input. The dataset was analyzed using Google Sheet, Orange, R, and VOS Viewer using text analytics on keyword occurrences, sentiment analysis, emotion profiling, and narrative development analysis.

The study found Singapore has become the most reliable source of information through its government and news media compared to others, with its balanced publication between the two ($r=0.99$) and well-enriched topic development ($\Sigma=1466$ terms by March 2020) as their characteristics. The study highlighted how Indonesia and the United States' full presidential systems have allowed the media's narrative to be affected mostly by its president opinion, and the amount of publication was dictated by confirmed COVID-19 case ($r \geq 0.8$). Sentiment analysis was similar, with when the country hit by the pandemic became the main factor of narrative changing from negative towards a more positive one. Through the pandemic, each country's narrative development becomes more distinct towards each other rather than becoming more coherent.

Keywords: Infodemiology, infoveillance, COVID-19, text analytics