

# Newspaper Analysis

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## Abstract

*Keywords:* text analysis, newspapers, R, shiny, lemmatization

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## 1. Objective

Our team is currently working on a suite of products to provide media analytics to e.g. political campaigns. As part of this project we perform some analyses of traditional media including online newspapers to obtain different metrics (theme of day, relation candidates-daily themes, repercussion of announcements, relations between candidates, importance of candidates in the daily news, etc) that will be used by the political analysts of a campaign.

## 2. Implementation

The first objective was to obtain of news articles, for this we implemented an R package easily configurable according to the structure of each newspaper site. The `rvest` (Wickham 2016) and `xml2` (Wickham, Hester, and Ooms 2018) packages were used for this purpose.

After going through these procedures the data is persisted on Amazon Web Services, we currently use an Aurora Relational Data-store. As a back-up the raw files are stored on AWS S3, which allows us to rerun cleansing procedures and analyses “from source” should this be needed.

For the news analysis our objective was the implementation of linguistic processing to improve the quality of the Spanish text analysis, for this we used the `Udpipe` package (Straka and Straková 2017). Also we implemented a sentiment analysis using `syuzhet` package (Jockers 2015) and the NRC lexicon.

Finally a Shiny App (Chang et al. 2015) was created to display the results of our analysis.

## 3. Access

Url Video: <https://www.youtube.com/watch?v=owfI4LU7KeU>

## References

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