

# Value Types

## Dataset Information

- The articles were published by Mashable ([www.mashable.com](http://www.mashable.com)) and their content as the rights to reproduce it belongs to them. Hence, this dataset does not share the original content but some statistics associated with it. The original content be publicly accessed and retrieved using the provided urls.
- Acquisition date: January 8, 2015  
<https://archive.ics.uci.edu/dataset/332/online+news+popularity>
- The estimated relative performance values were estimated by the authors using a Random Forest classifier and a rolling windows as assessment method. See their article for more details on how the relative performance values were set.

## Attribute Information:

|                                            |                                                         |
|--------------------------------------------|---------------------------------------------------------|
| 0.url: URL of the article (non-predictive) |                                                         |
| 1. timedelta:                              | Days between the article publication and the dataset    |
| 2. n_tokens_title:                         | Number of words in the title                            |
| 3. n_tokens_content:                       | Number of words in the content                          |
| 4. n_unique_tokens:                        | Rate of unique words in the content                     |
| 5. n_non_stop_words:                       | Rate of non-stop words in the content                   |
| 6. n_non_stop_unique_tokens:               | Rate of unique non-stop words in the content            |
| 7. num_hrefs:                              | Number of links                                         |
| 8. num_self_hrefs:                         | Number of links to other articles published by Mashable |
| 9. num_imgs:                               | Number of images                                        |
| 10. num_videos:                            | Number of videos                                        |
| 11. average_token_length:                  | Average length of the words in the content              |
| 12. num_keywords:                          | Number of keywords in the metadata                      |
| 13. data_channel_is_lifestyle:             | Is data channel 'Lifestyle'?                            |
| 14. data_channel_is_entertainment:         | Is data channel 'Entertainment'?                        |
| 15. data_channel_is_bus:                   | Is data channel 'Business'?                             |
| 16. data_channel_is_socmed:                | Is data channel 'Social Media'?                         |
| 17. data_channel_is_tech:                  | Is data channel 'Tech'?                                 |
| 18. data_channel_is_world:                 | Is data channel 'World'?                                |
| 19. kw_min_min:                            | Worst keyword (min. shares)                             |
| 20. kw_max_min:                            | Worst keyword (max. shares)                             |
| 21. kw_avg_min:                            | Worst keyword (avg. shares)                             |
| 22. kw_min_max:                            | Best keyword (min. shares)                              |
| 23. kw_max_max:                            | Best keyword (max. shares)                              |
| 24. kw_avg_max:                            | Best keyword (avg. shares)                              |
| 25. kw_min_avg:                            | Avg. keyword (min. shares)                              |
| 26. kw_max_avg:                            | Avg. keyword (max. shares)                              |
| 27. kw_avg_avg:                            | Avg. keyword (avg. shares)                              |
| 28. self_reference_min_shares:             | Min. shares of referenced articles in Mashable          |
| 29. self_reference_max_shares:             | Max. shares of referenced articles in Mashable          |
| 30. self_reference_avg_shares:             | Avg. shares of referenced articles in Mashable          |
| 31. weekday_is_monday:                     | Was the article published on a Monday?                  |
| 32. weekday_is_tuesday:                    | Was the article published on a Tuesday?                 |
| 33. weekday_is_wednesday:                  | Was the article published on a Wednesday?               |
| 34. weekday_is_thursday:                   | Was the article published on a Thursday?                |
| 35. weekday_is_friday:                     | Was the article published on a Friday?                  |
| 36. weekday_is_saturday:                   | Was the article published on a Saturday?                |

|                                   |                                                 |
|-----------------------------------|-------------------------------------------------|
| 37. weekday_is_sunday:            | Was the article published on a Sunday?          |
| 38. is_weekend:                   | Was the article published on the weekend?       |
| 39. LDA_00:                       | Closeness to LDA topic 0                        |
| 40. LDA_01:                       | Closeness to LDA topic 1                        |
| 41. LDA_02:                       | Closeness to LDA topic 2                        |
| 42. LDA_03:                       | Closeness to LDA topic 3                        |
| 43. LDA_04:                       | Closeness to LDA topic 4                        |
| 44. global_subjectivity:          | Text subjectivity                               |
| 45. global_sentiment_polarity:    | Text sentiment polarity                         |
| 46. global_rate_positive_words:   | Rate of positive words in the content           |
| 47. global_rate_negative_words:   | Rate of negative words in the content           |
| 48. rate_positive_words:          | Rate of positive words among non-neutral tokens |
| 49. rate_negative_words:          | Rate of negative words among non-neutral tokens |
| 50. avg_positive_polarity:        | Avg. polarity of positive words                 |
| 51. min_positive_polarity:        | Min. polarity of positive words                 |
| 52. max_positive_polarity:        | Max. polarity of positive words                 |
| 53. avg_negative_polarity:        | Avg. polarity of negative words                 |
| 54. min_negative_polarity:        | Min. polarity of negative words                 |
| 55. max_negative_polarity:        | Max. polarity of negative words                 |
| 56. title_subjectivity:           | Title subjectivity                              |
| 57. title_sentiment_polarity:     | Title polarity                                  |
| 58. abs_title_subjectivity:       | Absolute subjectivity level                     |
| 59. abs_title_sentiment_polarity: | Absolute polarity level                         |
| 60. shares:                       | Number of shares (target)                       |

## Numeric:

timedelta, n\_tokens\_title, n\_tokens\_content, n\_unique\_tokens, n\_non\_stop\_words, n\_non\_stop\_unique\_tokens, num\_hrefs, num\_self\_hrefs, num\_imgs, num\_videos, average\_token\_length, num\_keywords, global\_subjectivity, global\_sentiment\_polarity, global\_rate\_positive\_words, global\_rate\_negative\_words, shares, etc.

## Categorical:

url, data\_channel\_is\_lifestyle, data\_channel\_is\_entertainment, data\_channel\_is\_bus, data\_channel\_is\_socmed, data\_channel\_is\_tech, data\_channel\_is\_world, weekday\_is\_monday, weekday\_is\_tuesday, etc. Boolean: is\_weekend

## Coding Schemes

data\_channel\_is\_lifestyle, data\_channel\_is\_entertainment, etc. use 1 for “Yes” and 0 for “No”. weekday\_is\_monday, weekday\_is\_tuesday, etc. are using 1 to represent “True” and 0 to represent “False”.

## Data Quantity

Format: The data is in CSV format. The dataset of Mashable articles written before 2015, obtained from the UCI Machine Learning Repository

## Database Size

Dataset contains 61 columns and has 39,644 unique values.

## Data Quality

The data includes multiple characteristics that could be relevant to the business question of what contributes to an article's popularity. Are certain topics more popular than others? What days of the week should we publish articles to get the most shares?

variables below might be useful: `n_tokens_content`, `global_rate_negative_words`, `weekday_is_monday`, `weekday_is_tuesday`, etc. `is_weekend`, `num_shares`, `num_videos`