

A product will stay the same, but how do its ratings and reviews change? Exploring the structure of amazon ratings and reviews over time (Susanne Adler)

Sprache/Language: English

Almost a third of German internet users read online consumer reviews (OCRs) to gather information on products they want to buy (Statista, 2019). However, what information lies within these reviews, and how do they change over time? Common knowledge suggests that reviews should change as time passes, e.g. when video games or electronics become outdated. But does this hold true for 'real-life', observed ratings?

The master thesis will explore amazon ratings and reviews, and offer possible explanations of the observed patterns. Therefore, the thesis will include a short literature review and an analysis of amazon rating and review data (<http://jmcauley.ucsd.edu/data/amazon/index.html>). As the files are very large and text data requires special methods of analysis, the analysis requires a device with sufficient working memory and should be done using the R software for statistical computing (R Core Team, 2019). Students interested in this topic should have prior knowledge of R or be willing to obtain it (a tutorial for R basics can be found at <https://swirlstats.com/>, a tutorial on text analysis can be found at <https://tm4ss.github.io/>).

Introductory literature and references:

- Aerts, G., Smits, T., & Verlegh, P.W.J. (2017). How online consumer reviews are influenced by the language and valence of prior reviews: A construal level perspective. *Computers in Human Behavior*, 75, 855–864. <https://doi.org/10.1016/j.chb.2017.06.023>
- Guo, Y., Barnes, S. J., & Jia, Q. (2017). Mining meaning from online ratings and reviews: Tourist satisfaction analysis using latent dirichlet allocation. *Tourism Management*, 59, 467–483. <https://doi.org/10.1016/j.tourman.2016.09.009>
- R Core Team. (2019). *R: A Language and Environment for Statistical Computing*. Vienna, Austria. Retrieved from <https://www.R-project.org/>
- Salehan, M., & Kim, D. J. (2016). Predicting the performance of online consumer reviews: A sentiment mining approach to big data analytics. *Decision Support Systems*, 81, 30–40. <https://doi.org/10.1016/j.dss.2015.10.006>
- Statista. (April 23, 2019). *How do you search for specific information on a product that you want to buy? [Graph]*. In Statista. Retrieved October 06, 2019, from <https://www.statista.com/forecasts/998693/sources-of-information-about-products-in-germany>
- Wiedemann, G., & Niekler, A. Hands-On: A Five Day Text Mining Course for Humanists and Social Scientists in R (Teach4DH@GSCL 2017), Berlin, Germany, September 12, 2017, 57–65. Retrieved from <http://ceur-ws.org/Vol-1918/wiedemann.pdf> [get tutorial from <https://tm4ss.github.io/>]