Reviews Left and Right: The Link Between Reviewers' Political Ideology and Online Review Language

Lorenz Graf-Vlachy, Tarun Goyal, Yannick Ouardi, Andreas König

Business & Information Systems Engineering (2020)

Appendix (available online via http://link.springer.com)

Online Appendix

Consequence	Exemplary research on associated review properties					
Review helpfulness	 Review length is related to review helpfulness (Mudambi and Schuff 2010; Pan and Zhang 2011; Schindler and Bickart 2012) Argument density and diversity are related to review helpfulness (Willemsen et al. 2011) Non-evaluative statements are related to review helpfulness (Schindler and Bickart 2012) The mix of objective product information and subjective evaluative statements is related to review helpfulness (Ghose and Ipeirotis 2006, 2011) Review negativity is related to review helpfulness (Cao et al. 2011; Sen and Lerman 2007; Willemsen et al. 2011) Review negativity is related to review helpfulness (Wu 2013) Review positivity is related to review helpfulness (Pan and Zhang 2011; Schindler and Bickart 2012) Anxiety and anger are related to review helpfulness (Yin et al. 2014) Review quality (accuracy and currency) is related to review helpfulness (Coursaris et al. 2018) Review age is related to review helpfulness (Cao et al. 2011; Liu et al. 2008) Review extremity is related to review helpfulness (Cao et al. 2011; Forman et al. 2008; Ghose and Ipeirotis 2011; Mudambi and Schuff 2010) Linguistic style is related to review helpfulness (Cao et al. 2011; Li et al. 2019; Liu et al. 2008; Zhang and Varadarajan 2006) Expressive slang and humor are related to review helpfulness (Schindler and Bickart 2012) Readability is related to review helpfulness (Ghose and Ipeirotis 2011; Schindler and Bickart 2012) Availability of information on the reviewer is related to review helpfulness (Forman et al. 2008; Schindler and Bickart 2012) Reviewer expertise (claims) and credibility are related to review helpfulness (Forman et al. 2008; Liu et al. 2008; Willemsen et al. 2011; Smith et al. 2005) Expressed reviewer innovativeness is related to review helpfulness (Pan and Zhang 2011) 					
Purchase intention	 Review helpfulness is related to purchase intention (Coursaris et al. 2018) Review quality (soundness, credibility, and fact-basedness of arguments) is linked to purchase intention (Lin et al. 2011) 					
Sales	 Mix of objective product information and subjective evaluative statements is related to sales (Ghose and Ipeirotis 2011) Availability of information on the reviewer is related to sales (Forman et al. 2008) Textual content of reviews is related to sales (Archak et al. 2011) 					
Other	 Presence of sentiment scores in reviews is linked to speed of consumers' decision-making (Lak and Turetken 2017) Content of reviews is linked to consumers' trust in sellers' benevolence and credibility (Pavlou and Dimoka 2006) 					

Table A1. Exemplary research on consequences of review properties (excluding research on consequences of review ratings)

Domain	Conservative Share	Domain	Conservative Share	Domain	Conservative Share	Domain	Conservative Share
timesofindia.indiatimes.com	0.04	news.com.au	0.39	csmonitor.com	0.47	jsonline.com	0.61
economist.com	0.12	dailykos.com	0.39	realclearpolitics.com	0.47	newsmax.com	0.61
northjersey.com	0.14	bloomberg.com	0.39	usatoday.com	0.47	factcheck.org	0.62
ocregister.com	0.15	dailyfinance.com	0.39	cnbc.com	0.47	reason.com	0.63
mercurynews.com	0.17	syracuse.com	0.39	dailymail.co.uk	0.47	washingtonexaminer.com	0.63
nj.com	0.17	usnews.com	0.39	mirror.co.uk	0.47	ecanadanow.com	0.63
sfgate.com	0.19	timesunion.com	0.40	news.yahoo.com	0.47	americanthinker.com	0.65
baltimoresun.com	0.19	time.com	0.40	abcnews.go.com	0.48	twincities.com	0.67
courant.com	0.22	reuters.com	0.41	upi.com	0.48	jacksonville.com	0.67
jpost.com	0.25	telegraph.co.uk	0.41	chicagotribune.com	0.49	opposingviews.com	0.67
prnewswire.com	0.27	businessweek.com	0.42	ap.org	0.50	chron.com	0.67
sun-sentimel.com	0.27	cnn.com	0.42	nbcnews.com	0.50	startribune.com	0.68
nationalpost.com	0.28	politico.com	0.42	suntimes.com	0.51	breitbart.com	0.70
thestar.com	0.28	theatlantic.com	0.42	freep.com	0.52	star-telegram.com	0.74
bbc.co.uk	0.30	nationaljournal.com	0.43	azcentral.com	0.53	stltoday.com	0.75
wickedlocal.com	0.30	alternet.org	0.43	tampabay.com	0.54	mysanantonio.com	0.77
nytimes.com	0.31	ajc.com	0.44	orlandosentinel.com	0.54	denverpost.com	0.80
independent.co.uk	0.32	forbes.com	0.44	thehill.com	0.57	triblive.com	0.85
philly.com	0.32	seattletimes.com	0.44	nationalreview.com	0.57	sltrib.com	0.85
hollywoodreporter.com	0.33	rawstory.com	0.44	news.sky.com	0.58	dallasnews.com	0.86
miamiherald.com	0.35	newsday.com	0.44	detroitnews.com	0.59	kansascity.com	0.93
huffingtonpost.com	0.35	cbsnews.com	0.45	express.co.uk	0.59	deseretnews.com	0.94
guardian.co.uk	0.37	rt.com	0.45	weeklystandard.com	0.59	topix.com	0.96
washingtonpost.com	0.37	theepochtimes.com	0.46	foxnews.com	0.59	knoxnews.com	0.96
online.wsj.com	0.39	latimes.com	0.47	washingtontimes.com	0.59	al.com	1.00

Table A2. List of news websites and conservative share (according to Flaxman et al. 2016)

References for Online Appendix

- Archak N, Ghose A, Ipeirotis PG (2011) Deriving the Pricing Power of Product Features by Mining Consumer Reviews. Manag Sci 57(8):1485–1509.
- Cao Q, Duan W, Gan Q (2011) Exploring determinants of voting for the "helpfulness" of online user reviews: A text mining approach. Decis Support Syst 50(2):511–521.
- Coursaris CK, Van Osch W, Albini A (2018) Antecedents and Consequents of Information Usefulness in User-generated Online Reviews: A Multi-group Moderation Analysis of Review Valence. AIS T Hum-Comput Interact 10(1):1–25.
- Flaxman S, Goel S, Rao JM (2016) Filter bubbles, echo chambers, and online news consumption. Public Opin Q 80(S1):298–320.
- Forman C, Ghose A, Wiesenfeld B (2008) Examining the relationship between reviews and sales: The role of reviewer identity disclosure in electronic markets. Inf Syst Res 19(3):291–313.
- Ghose A, Ipeirotis PG (2006) Designing Ranking Systems for Consumer Reviews: The Impact of Review Subjectivity on Product Sales and Review Quality. In: Proc 16th Annu Workshop Inf Technol Syst, pp 303–310.
- Ghose A, Ipeirotis PG (2011) Estimating the Helpfulness and Economic Impact of Product Reviews: Mining Text and Reviewer Characteristics. IEEE T Knowl Data Eng 23(10):1498–1512.
- Lak P, Turetken O (2017) The Impact of Sentiment Analysis Output on Decision Outcomes: An Empirical Evaluation. AIS T Hum Comput Interact (9)1:1–22.
- Li ST, Pham TT, Chuang HC (2019) Do reviewers' words affect predicting their helpfulness ratings? Locating helpful reviewers by linguistics styles. Inf Manag 56(1):28–38.
- Lin C-L, Lee S-H, Horng D-J (2011) The effects of online reviews on purchasing intention: The moderating role of need for cognition. Soc Behav Pers: Int J 39(1):71–81.
- Liu Y, Huang X, An A, Yu X (2008) Modeling and predicting the helpfulness of online reviews. In: IEEE Int Conf Data Mining, pp 443–452.
- Mudambi SM, Schuff D (2010) What Makes a Helpful Online Review? A Study of Customer Reviews on Amazon.com. MIS Q 34(1):185–200.
- Pan Y, Zhang JQ (2011) Born Unequal: A Study of the Helpfulness of User-Generated Product Reviews. J Retail 87(4):598–612.
- Pavlou PA, Dimoka A (2006) The Nature and Role of Feedback Text Comments in Online Marketplaces: Implications for Trust Building, Price Premiums, and Seller Differentiation. Inf Syst Res 17(4):392–414.
- Schindler RM, Bickart B (2012) Perceived helpfulness of online consumer reviews: The role of message content and style. J Consumer Behav 11:234–243.
- Sen S, Lerman D (2007) Why Are You Telling Me This? An Examination into Negative Consumer Reviews on the Web. J Interact Mark 21(4):76–94.
- Smith D, Menon S, Sivakumar K (2005) Online peer and editorial recommendations, trust, and choice in virtual markets. J Interact Mark 19(3):15–37.
- Willemsen LM, Neijens PC, Bronner F, De Ridder JA (2011) "Highly recommended!" The content characteristics and perceived usefulness of online consumer reviews. J Computer-Mediated Comm 17(1):19–38.
- Wu PF (2013) In Search of Negativity Bias: An Empirical Study of Perceived Helpfulness of Online Reviews. Psychol Mark 30(11):971–984.
- Yin D, Bond S, Zhang H (2014) Anxious or Angry? Effects of Discrete Emotions on the Perceived Helpfulness of Online Reviews. MIS Q 38(2):539–560.
- Zhang Z, Varadarajan B (2006) Utility scoring of product reviews. In: Proc 15th ACM Int Conf Inf Knowl Manag, pp 51–57.