

## Evidence of the Influence and Value of Customer Reviews for Purchase Decisions



Spiegel Research Center

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Now, more than ever, consumers have more control over how they share their brand experiences — good or bad — with the global audience. Online customer reviews (OCRs) are becoming increasingly important — various surveys report that consumers trust recommendations or opinions from other consumers more than traditional forms of advertising such as commercials or product placements on mass media. Given the importance of OCRs, the Spiegel Research Center (SRC) conducted a series of studies to help companies understand the effects of reviews on consumers and help marketers better manage OCRs.

### MODEL TO ASSESS IMPACT OF REVIEWS ON A BRAND AND CATEGORY.

From *“The value of online customer reviews”* (2016b)

Asklidis and Malthouse (2016b) devised a method to assess the overall value of reviews to a brand. The method studies how the conversion rate changes as more reviews are added to a brand. The difference between the conversion rate with no reviews and the conversion rate with a large number of reviews is the value of reviews. The overall conversion rate is low when there are no reviews and increases 270% as the number of reviews increase (see graphs on p.31).

**TAKEAWAY:** Forecast the impact of reviews on sales.

**REVIEWS HAVE A GREATER EFFECT WHEN THERE IS A HIGHER VOLUME.**  
From *“Do Customer Reviews Drive Purchase? The Moderating Roles of Review Exposure and Product Involvement”* (2016)

Additionally, Maslowska et al. (2016) expect for the average star rating (valence) of reviews to have a greater effect when there are many reviews than when there are few for several reasons: (1) it could signal to the prospective buyer that the product is popular; (2) it shows that other people who have purchased the product care enough to make the effort to write a review; (3) the volume

may indicate reliability and trustworthiness; or (4) consumers will rely on the summary valence measure rather than reading individual reviews (see tables on p.31).

**TAKEAWAY:** Encourage customers to write reviews after purchasing a product.

### PERFECT RATINGS MAKE OCERS SEEM “TOO GOOD TO BE TRUE.”

From *“Too Good to be True: The Role of Online Reviews’ Features in Probability to Buy”* (2016)

While valence has a general positive effect on purchase, Maslowska, Malthouse and Bernritter (2016) are able to qualify this conclusion. This study shows that when a product has all five-star reviews (so that the valence is 5), the purchase probability is a bit less than when valence is less than 5, that is, when not all reviews are perfect. The purchase probabilities peak when valence is about 4.5 stars, across the eight categories and four companies researched. An explanation for this finding is that consumers perceive a product having all five-star reviews as being too good to be true and become skeptical.

**TAKEAWAY:** Do not filter out negative reviews, as they may positively influence sales.

### OCERS HAVE A GREATER EFFECT ON CUSTOMERS WHO CHOOSE TO READ THEM.

From *“Do Customer Reviews Drive Purchase? The Moderating Roles of Review Exposure and Product Involvement”* and *“Disentangling the Effect of Online Product Review Features on Purchase Behavior”* (2016)

According to Maslowska et al. (2016), there are several reasons why a customer may choose to read reviews. Many times, it reflects the consumer’s uncertainty about the product. Someone who does not choose to read reviews either does not trust them or does not need additional information, perhaps because they have purchased the product before. Either way, we would expect the valence of the reviews to have a stronger effect on someone who chooses

to read the review .

Kim et al. (2016) focuses on situations where consumers are actually reading reviews and finding the “right” length of review. The “right” length of a review probably depends on the category, where consumers may be willing to read longer reviews for a high-involvement purchase (such as a washing machine) but less willing to read a long review for a low-involvement purchase (such as shampoo).

**TAKEAWAY:** Understand the circumstances in which reviews have uncommonly high and low influence on purchases.

### THERE’S A GREATER IMPACT FROM ACTUAL, VERIFIED BUYERS.

From *“Understanding and overcoming biases in customer reviews”* (2016a)

Asklidis and Malthouse (2016a) explore the difference between verified buyers and anonymous reviewers. Nearly all reviews from verified buyers were in response to an email sent to customer after purchase, where the customer can submit a rating with a single click. Anonymous reviewers must find the webpage for a particular product and create a login to write a review. Depending on the retailer, the valence of reviews from verified buyers is between 0.5 and 1 star higher than from anonymous reviewers. An explanation for this finding is the self-selection bias —those who had a negative experience are more likely to invest the effort to find the right page to write the review, while responding to an email is much easier and includes a more representative set of customers.

**TAKEAWAY:** Consider incentivizing reviewers to write reviews to obtain more reviews from verified buyers.

### Sources:

Asklidis and Malthouse (2016a), *Understanding and overcoming biases in customer reviews, under review at Decision support systems.*

Asklidis and Malthouse (2016b), *The value of online customer reviews, accepted at ACM Conference on Recommender Systems.*

Kim, Maslowska and Malthouse (2016), *Disentangling the Effect of Online Product Review Features on Purchase Behavior, ICORLA, Ljubljana.*

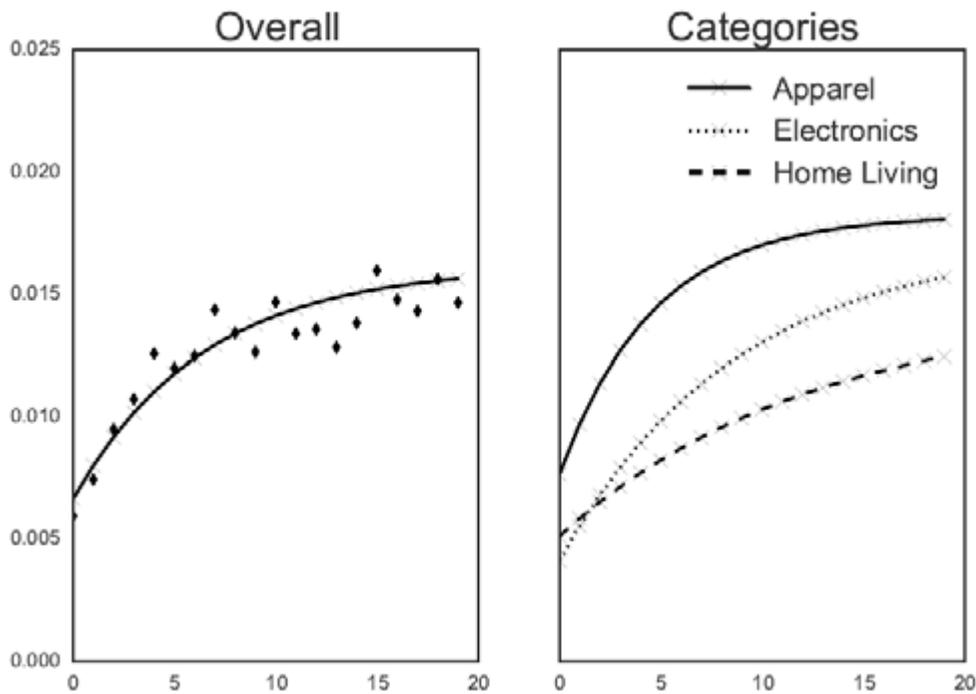
Maslowska, Malthouse, Bernritter (2016), *Too good to be true: The Role of Online Reviews’ Features in Probability to Buy, International Journal of Advertising.*

Maslowska, Viswanathan, Malthouse (2016), *Do Customer Reviews Drive Purchase? The Moderating Roles of Review Exposure and Product Involvement, under review at Decision support systems.*

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# Northwestern on data

## Graphs



Effect of Number of Displayed Reviews on the Conversion Rate

## Tables

Table 1: Descriptive Statistics (Study 1 & Study 2)

Variable	Study 1				Study 2			
	Mean	SD	95% LCL	95% UCL	Mean	SD	95% LCL	95% UCL
Log Price	-0.28	5.62	-0.29	-0.28	6.59	1.15	6.57	6.59
Volume	39.64	86.77	39.54	39.74	12.88	21.70	12.87	12.89
Valence	4.19	0.72	4.19	4.19	3.61	1.18	3.61	3.61

Table 2: Frequencies (Study 1 & Study 2)

	Study 1		Study 2	
	Frequency	Percent	Frequency	Percent
Exposure				
No	2,522,615	88.59	8,545,194	76.68
Yes	324,764	11.41	2,598,060	23.32
Number of reviews				
1	356,554	12.52	2,344,260	21.04
2-4	500,781	17.59	3,122,628	28.02
5+	1,990,044	69.89	5,676,366	50.94
Price				
Low	1,546,657	54.32		
High	1,300,722	45.68		

The Effects of Average Star Ratings on Purchase Behaviours

# Additional Author Bios

Cyndi W. Greenglass is a founding partner and senior vice president of strategic solutions at Diamond Marketing Solutions, a \$100M data-driven communications company. Cyndi is a member of the executive management team, where she manages the strategic planning process and participates in strategic acquisitions. Cyndi was named into the Top 100 Influential BTB Marketers by Crain's B@B Magazine twice and is the 2012 CADM Chicago Direct Marketer of the Year. She is an adjunct instructor at both Aurora University and WWU and lectures on data-driven marketing strategies nationally.

"Telling a Memorable Story with Your Data" p 20.

Abhishek Jadon leads content and data strategy for Gatorade. In this role, he is responsible for developing digital branded content that focuses on authentic storytelling and for the implementation of marketing technologies to drive media optimization and content personalization at scale. He brings 11-plus years of experience in executing digital campaigns, conceptualizing digital strategy and leveraging technological trends at leading CPG companies, including Pepsi, Kraft and Cadbury. He provides a unique perspective informed by a global mindset developed through an international exposure of living and working in four different countries along with roles within cross-functional teams.

"Personalized Marketing @ Scale" p 24.

Amanda Slavin is a millennial and Generation Z expert and the CEO/founder of CatalystCreativ, an experience studio focused on helping cities, brands and institutions flourish by developing educational and inspirational strategy, along with on and offline campaigns to engage millennials. Amanda and CatalystCreativ have worked with brands spanning from NPR, Dell, Ekocycle and Starwood Hotels. Amanda was listed on last year's Forbes 30 Under 30 for marketing and advertising. She is a founding advisory board member for NPR's millennial arm, GenListen, and an advisor to Mama Hope and I Am That Girl.

"Decoding the Millennial Enigma" p 15.

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Tom Collinger is the executive director of the Spiegel Digital & Database Research Center; senior director of the Medill Distance Learning Initiative; and an associate professor at Medill. He is a widely recognized expert and speaker in the areas of integrated marketing communications; direct, database and e-commerce marketing management; customer loyalty; customer relationship management; and channel integration.

Edward C. Malthouse is the research director of the Spiegel Digital & Database Research Center and the Theodore R. and Annie Laurie Sills Professor of Integrated Marketing Communications at Medill. He is an expert in applied statistics, market research and media marketing. His research focuses on the intersection of consumers' experience with media, customer value, marketing strategies and interactive marketing technologies.

Yorgos (George) Askalidis is a doctoral student in the Computer Science Theory group at Northwestern University. He received his B.S. and M.S. in mathematics from the University of Athens. His research revolves around online user-generated reviews. His area of focus is around the relationship between reviews, biases and usefulness of information to potential buyers.

Vijay Viswanathan is an assistant professor in the Medill School of Journalism in media and integrated marketing communications, and a research associate of the Spiegel Digital & Database Research Center. His research interests include media choice and multitasking, brand management, consumer psychology, marketing strategy and marketing mix models.

Chinye Osamusali is the data visual director for the Spiegel Research Center impact marketing team and a full-time student in the Medill Integrated Marketing Communications program. Prior to her enrollment at Northwestern, she worked for a year at SAP doing field marketing and earned her B.A. in english rhetoric and professional writing from University of Waterloo in Canada.