ZION & ZION

Angry or Just Sad? Our IBM Watson Analysis of 26,955 1-Star Home-Service Reviews

Authors: Aric Zion, MS; Thomas Hollmann, MBA, PhD; Nicole Medina | 2018

EXECUTIVE SUMMARY

To help home-service companies better understand their customers, the Zion & Zion research team leveraged IBM's Watson artificial intelligence engine API to examine customer emotions behind online reviews. The purpose of this approach was to investigate how feelings such as anger and sadness may be a part of customer dissatisfaction and resulting reviews. We find that customers are often significantly more sad than angry when they post a negative home-service company review. We discuss the implications for the home-service industry with respect to building empathy with customers.
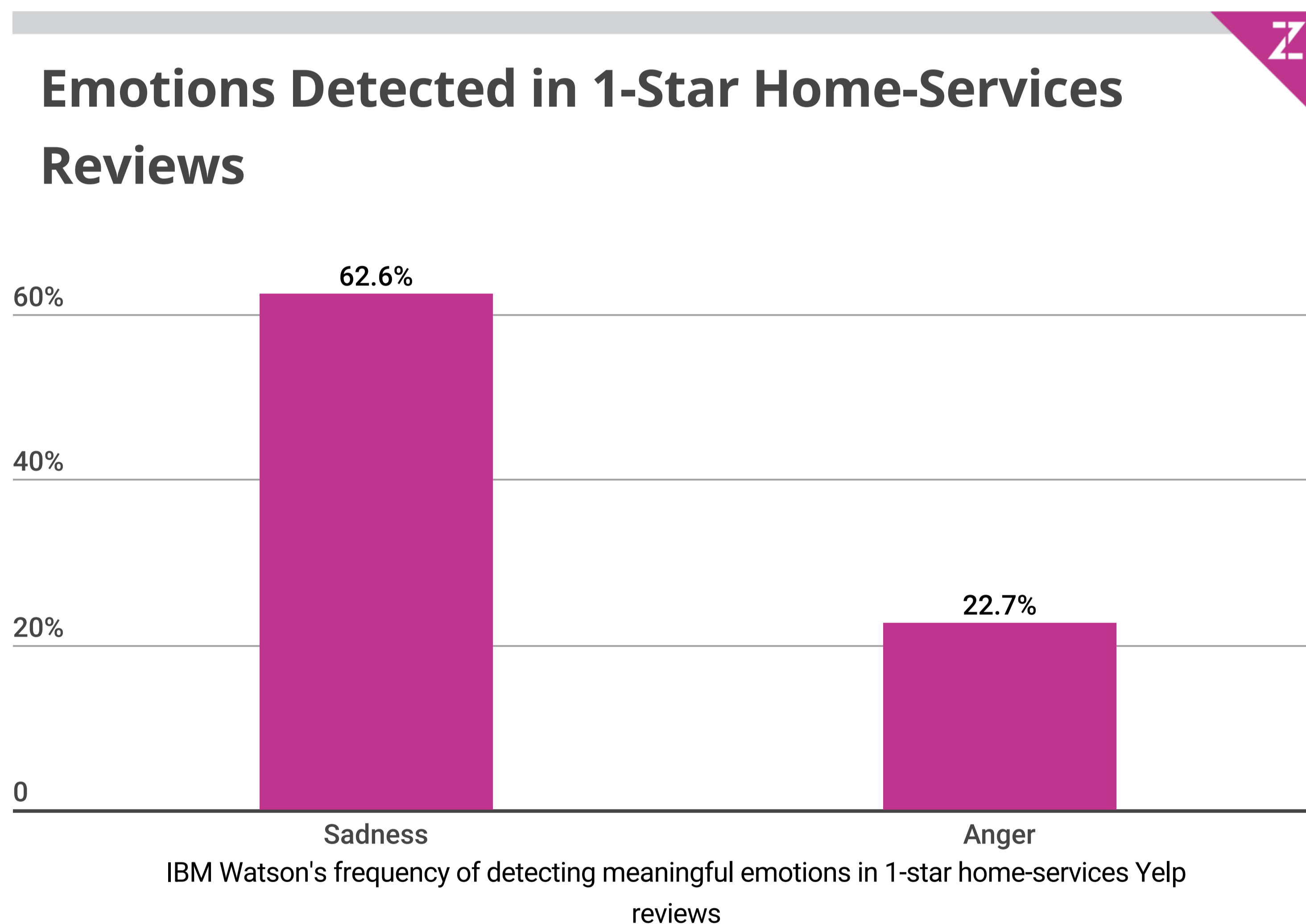
ARE UNHAPPY CONSUMERS ACTUALLY SAD OR ARE THEY JUST PLAIN ANGRY?

IBM's Watson artificial intelligence service is named after the company's first CEO, Thomas J. Watson. Watson has been deployed on such projects as making utilization management decisions for lung cancer treatment, battling Jeopardy contestants, and weather forecasting.

Using the Watson Tone Analyzer API, the Zion & Zion research team performed linguistic analysis of 26,955 1-star Yelp reviews to understand the emotional nature of poor reviews.

Figure 1 shows to what extent Watson identified the emotions of sadness and anger among 1-star reviews.

Figure 1

Emotions Detected in 1-Star Home-Services Reviews

IBM Watson's frequency of detecting meaningful emotions in 1-star home-services Yelp reviews

Our research team was most interested in understanding the intense emotions that lead people to take the time to write and post a very poor review. We knew from extensive interactions with our home-service clients that home-service companies generally believe review sites to be a venue filled with overwhelming anger. After all, people driven to post a damaging review are mostly angry, right? Apparently not, based on our research. Our use of the Watson Tone Analyzer discovered, perhaps surprisingly, that sadness is the driving emotion here, with nearly three times as many people expressing detectable levels of sadness as opposed to anger—62.6% to 22.7%. IBM Watson classifies sadness as a feeling of loss and disadvantage.

PUTTING THE DATA TO WORK

When a customer is angry, it's easy to "get your back up," and to become angry and defensive in response. However, when a customer is sad, it's much easier to empathize with them and to address the situation.

Our research suggests that home-service companies can develop empathy with their customers by understanding that negative reviewing behavior is driven far more by feelings of sadness and disappointment than by outright feelings of anger.

Home-service companies should do the following. Recognize that most negative review customers are sad/disappointed. Listen with empathy and accept a customer's need to express their emotions.