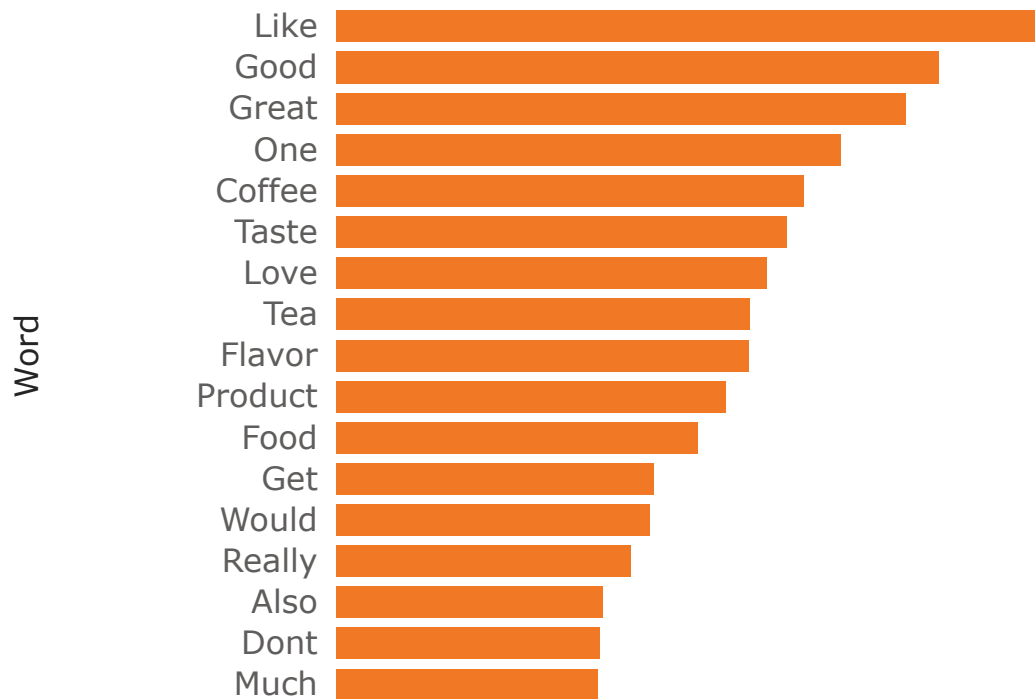


# Sentiment Analysis

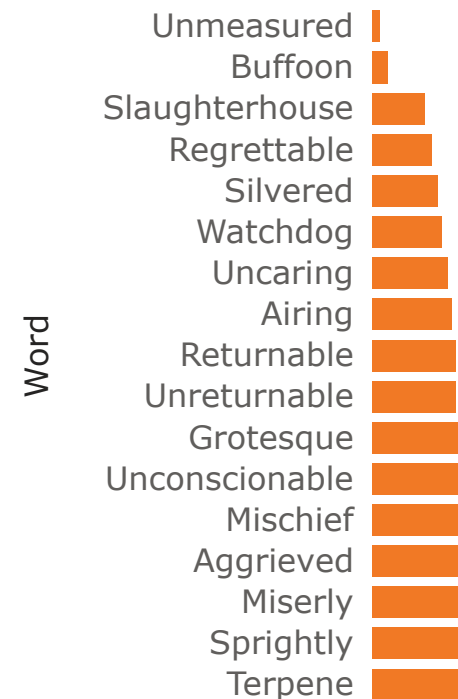
## Sentiment-Driven Vocabulary in Customer Feedback

(Words extracted using python NLTK)

### Positive Words



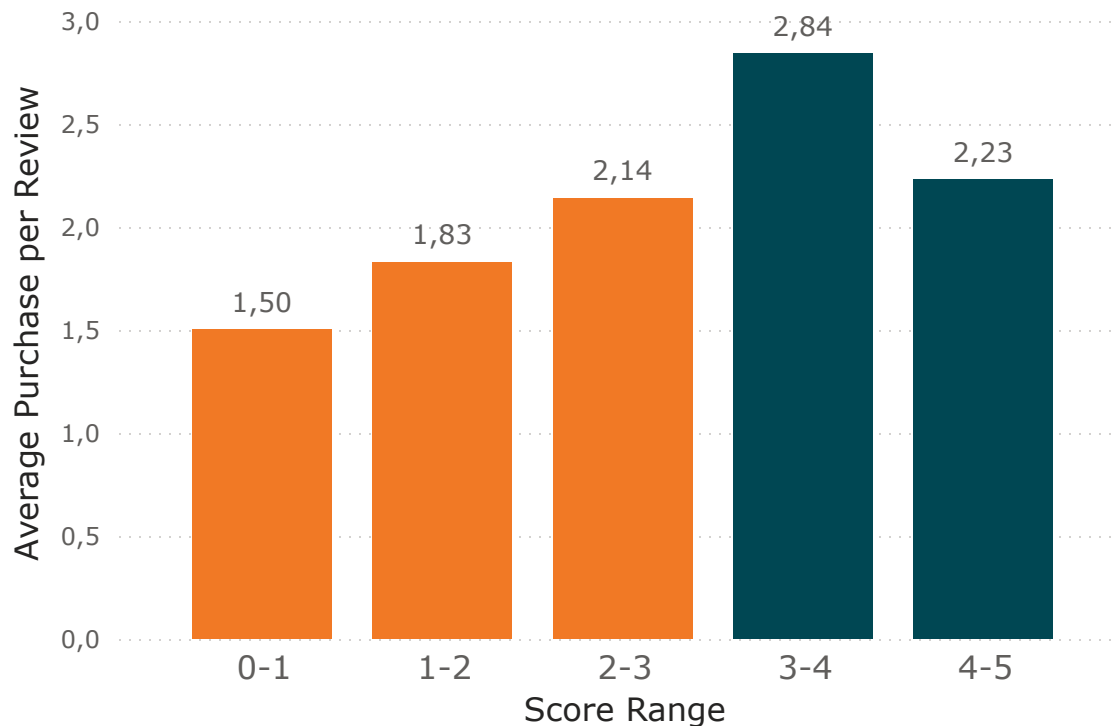
### Negative Words



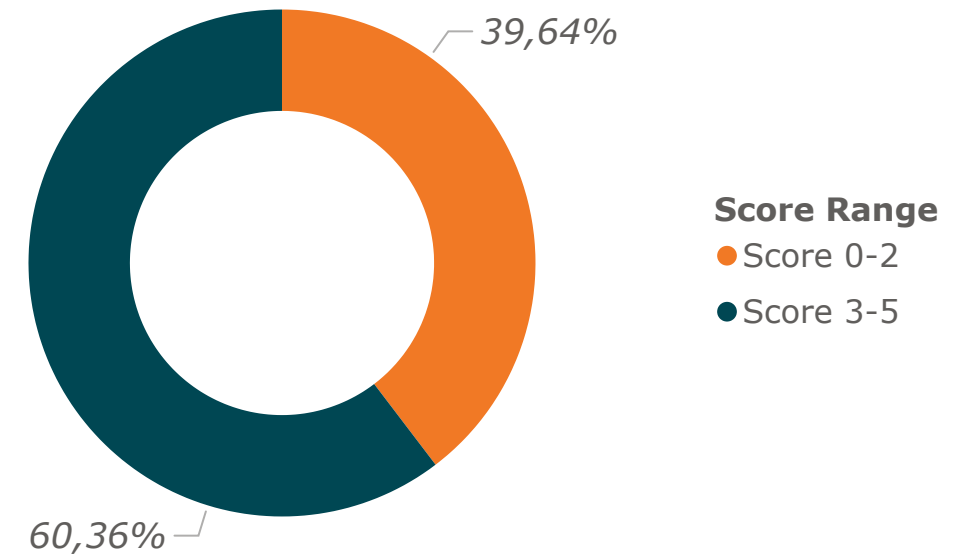
# Purchases Based on Review Score

Understanding how review sentiment correlates with purchasing behavior

## Average Purchase by Rating Score



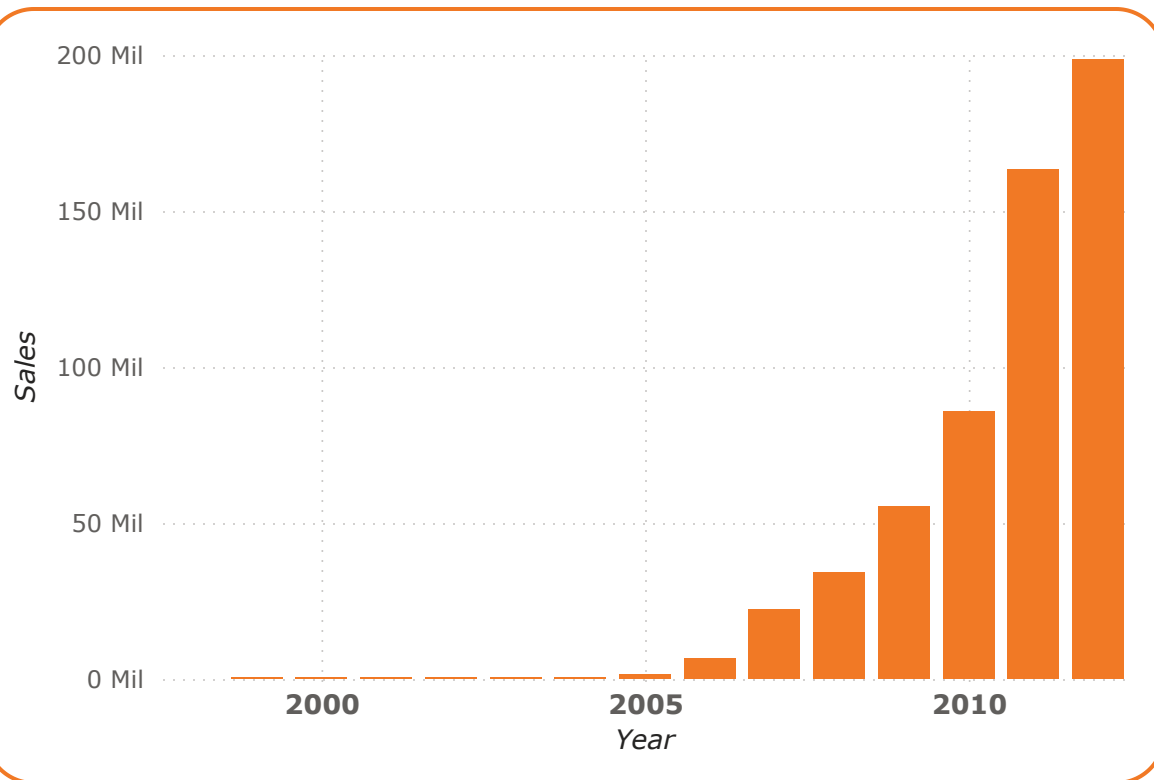
## Average Purchase in Positive vs. Negative Reviews



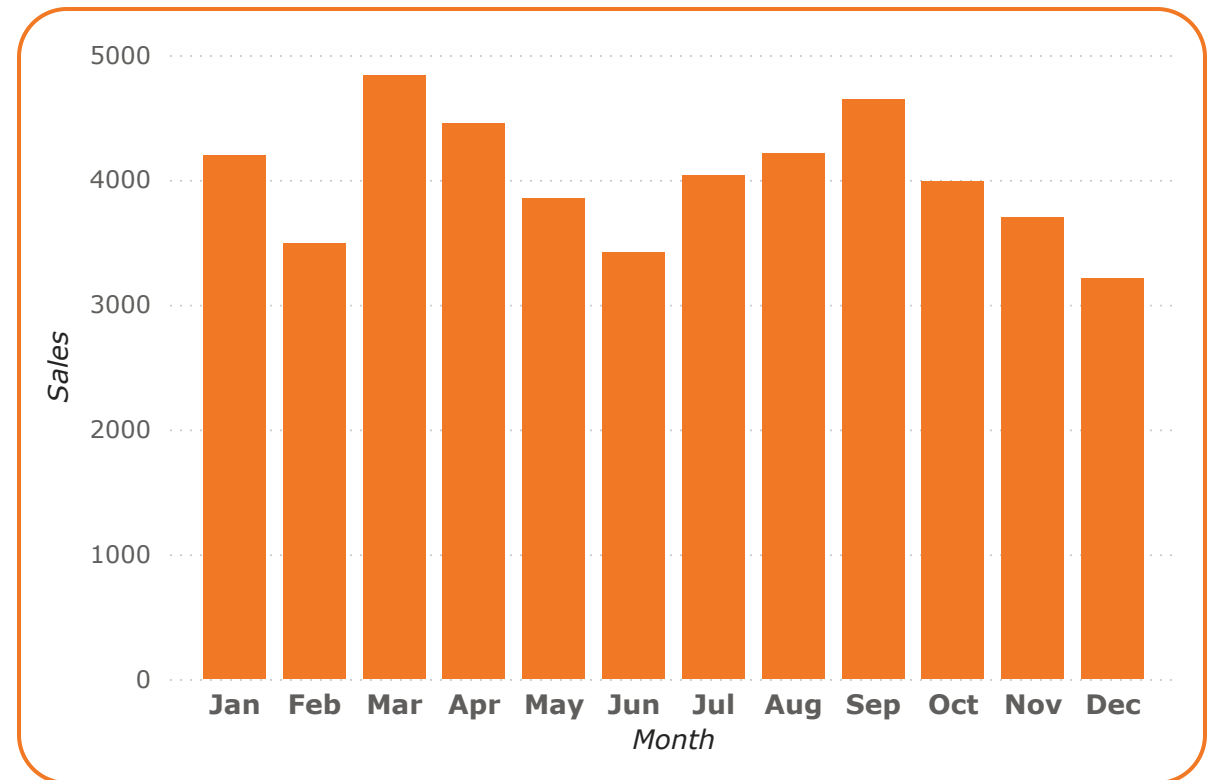
# Year-Month Sales (1999 - 2012)

Tracking Sales Performance Over Time and Identifying Monthly Patterns

## Sales Performance Over Time



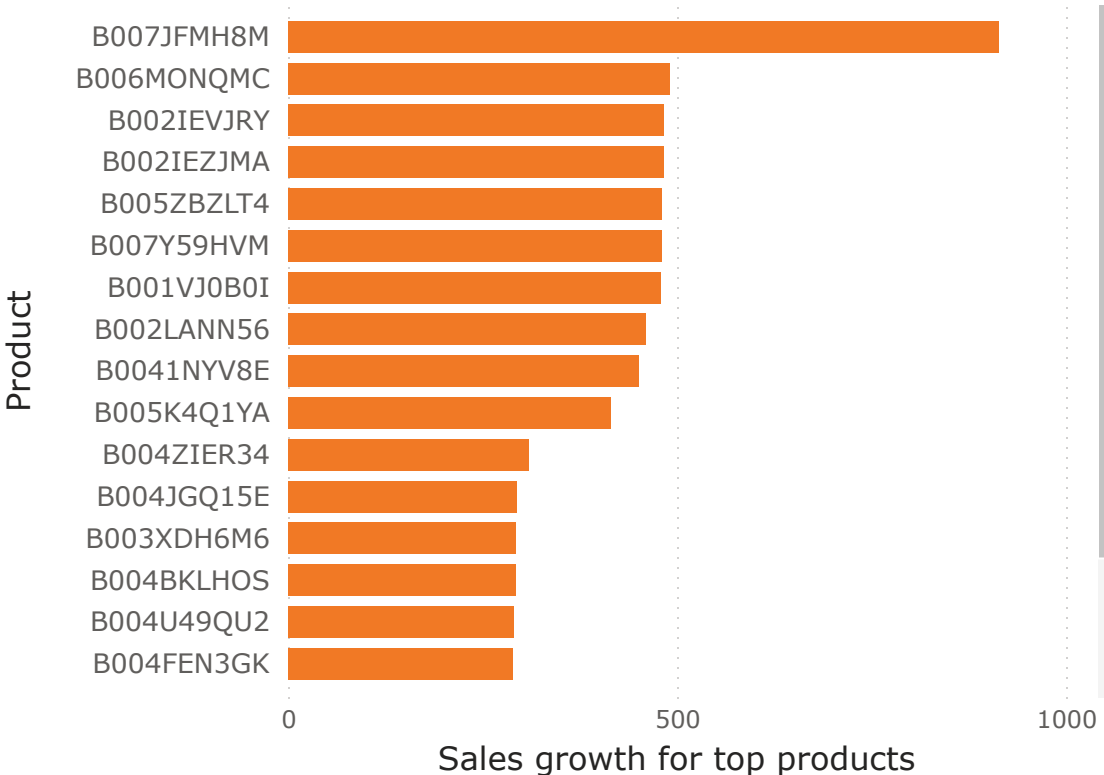
## Monthly Sales Pattern



# Top Food Sales

Highlighting the Best-Selling Food Products

## Sales per Product



## Year Filter

1999	2003	2007	2011
2000	2004	2008	2012
2001	2005	2009	
2002	2006	2010	

# Key Findings

- **Logistics Over Product Quality:** Negative reviews frequently cite shipping issues rather than product flaws. *By improving logistics partnerships, Amazon sellers could reduce 1-star reviews by 20% or more.*
- **The Power of Balanced Reviews:** Products with 3-4 star ratings drive 2.5x more sales than 5-star products. *Consumers perceive moderately-rated reviews as more authentic and trustworthy than perfect scores.*
- **Explosive Market Growth:** Yearly sales consistently increased, with sales doubling from 2010 to 2011. *This surge suggests either effective marketing strategies or rising demand for online food purchases during that period.*
- **Emerging Product Potential:** Product "B007JFMH8M" (appeared only in 2012) showed unusually high sales spikes compared to established products. *New and well-positioned products can rapidly capture market share, indicating opportunities for sellers to test innovative offerings.*