



# AI-powered Review Analysis



## UNLOCK ACTIONABLE CONSUMER INSIGHTS WITH AI-POWERED REVIEW ANALYSIS

We are excited to announce a new service from the Q data science team: AI-powered review analysis. We provide analyses of customer reviews for any product category, in any European language. The service is simple: just pick the product category, and we deliver a detailed PDF report packed with insights about products, purchase criteria and the category as a whole. We have already created reports about energy bars, water filters, washing machines, drills, and a dozen other categories.

### Reviews are a window into the customer's mind

In reviews, customers talk about what they like and dislike, and what they wish for. They share their experiences and use cases. Thanks to years of historic data, we can also see changes and trends over time.

This information empowers product development, quality assurance and marketing:

- Considering entering a new category? Reviews reveal what customers expect and where existing products fall short.
- Looking to improve products? Find the pain points customers encounter and what they love most.
- Curious what competitors are up to? Benchmark their products aspect-by-aspect and check how price and value are perceived.
- Seeking the perfect shopping experience? See what customers say about delivery, packaging, and customer service.

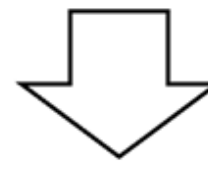
However, reading thousands of reviews of one's own and competitors' products is a time-consuming task. It's far too much volume for classic qualitative content analysis. This is where our AI-powered review analysis comes in.

### World class accuracy, enhanced depth of analysis

Our fine-tuned language model for aspect-based sentiment analysis (ABSA) is the core of our offering. In a previous experiment we've achieved [state-of-the-art results](#) on the standard SemEval 2014 benchmark. Since, we have re-thought ABSA and built a model that offers much greater depth of analysis than standard approaches. We have trained our model on nearly 5,000 hand-labeled examples.

Let's consider an example review about sunscreen:

   
*"The sunscreen is **easy to apply** and **absorbs quickly**. Most importantly, it provides **safe and reliable sun protection**. I keep buying it, even though it's **rather expensive**."*



Aspect	Polarity	Descriptors	Importance
Application	Positive	Easy	Medium
Absorption	Positive	Quickly	Medium
Sun protection	Positive	Safe, reliable	High
Price	Negative	Rather expensive	Medium

The model takes unstructured review text and turns it into a table that neatly splits the review into aspects, their polarity, the descriptive words used, and the importance of the aspect relative to other aspects.

This analysis provides more actionable insights than classic sentiment analysis. It explains which aspects customers care about, how they rank in importance, and how they feel about them, in their own words.

### An efficient process

A project has three steps:



Review collection



Analysis with AI



Reporting

1. Review collection: We collect publicly available reviews from thousands of shops in Germany, Europe and the US, including Amazon.
2. Analysis with AI: Our model reads the reviews and extracts the opinions of the customers.
3. Reporting: We compile the results into a detailed PDF report.

Thanks to automated quality checks at every step, we can confidently deliver results in a short time.

### Showcase: Dog food reviews

Q has an [office dog](#) on occasion, so we were naturally curious about the best food for her. We collected 13,832 reviews from amazon.de, barfers-wellfood.de, fressnapf.de and 65 other shops.

First, let's see which aspects reviewers care most about:

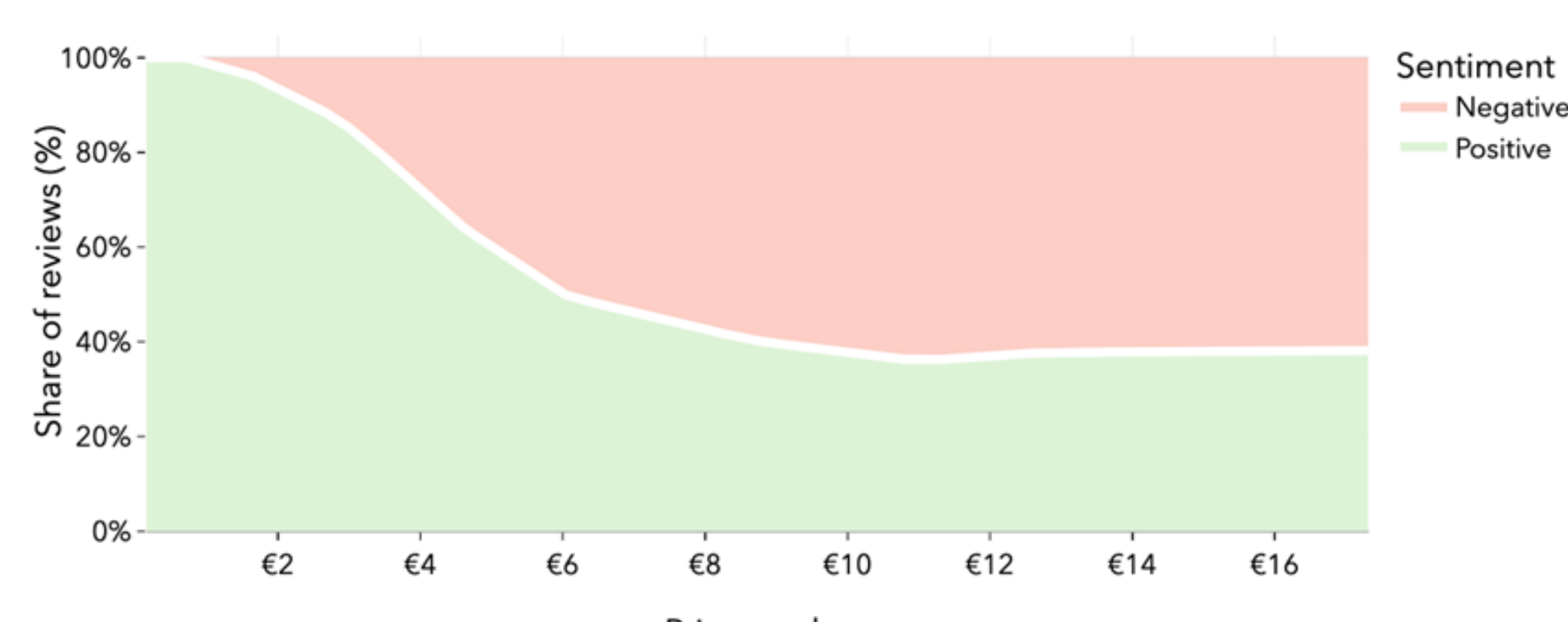
Aspect	Reviews	Positive	Neutral	Negative
1 Acceptance	5,277	92%	1%	6%
2 Digestion	4,322	90%	3%	7%
3 Taste	2,048	91%	5%	4%
4 Ingredients	1,448	75%	12%	13%
5 Price	1,376	57%	13%	30%
6 Quality	1,271	89%	2%	9%
7 Health	1,105	87%	5%	8%
8 Smell	939	68%	13%	19%
9 Size	812	59%	15%	26%
10 Packaging	657	54%	12%	33%

Clearly, the acceptance of the food by the dog is the #1 criterion. Price is only on rank 5, behind digestion, taste and ingredients. The most negatively mentioned aspects are price, size and packaging.

We dug deeper and analyzed the descriptive words reviewers used for ingredients:



Consumers are looking for high meat content and dislike preservatives, sugar, grains, corn and ash. It's also important to them that the ingredient list is clear and transparent. Regarding price, we wondered what the relationship between price and statements about the price is. That means we're looking at reviews that explicitly mention the price and how they feel about it, e.g. "that's good value for money" or "too expensive".



As expected, the higher the price, the more unhappy comments about it. Prices up to 3 EUR per kg are well accepted, with a steeper decline in acceptance after that. Satisfaction with the price bottoms out at 40%. Some premium and specialty products can warrant prices up to 16 EUR per kg.

So, what's our recommendation? Taking the star rating of 4.87 out of 5, the review text and high number of reviews (over 500) into account, it's Platinum's Chicken Dry Dog Food. The only downside is the price, but they offer volume and subscription discounts. Reviewers love many aspects of the product:

<p><b>Taste</b></p> <p>My labrador totally enjoys the flavor; in addition it's useful as a reward during training</p>	<p><b>Quality</b></p> <p>Platinum is a high quality food. The vet also thinks that.</p>
<p><b>Digestion</b></p> <p>Digestion is perfect. She is fit and healthy.</p>	<p><b>Fur</b></p> <p>The fur has become brilliantly silky</p>
<p><b>Ingredients</b></p> <p>High meat content convinced me</p>	<p><b>Consistency</b></p> <p>It's also great that the food doesn't soak up so much liquid</p>

That was a very quick tour of the insights review analysis can provide! There's much more to discover in the full report.

### Learn more

If reviews are relevant for your business, we'd like to hear from you. We're happy to share a full, 70-page sample report. Just drop us a line at [info\(at\)teamq.de](mailto:info(at)teamq.de).

Reports start at 1,500 EUR (plus VAT) for a single product category. Our offer is simple: a one-time payment for an in-depth PDF report. No subscription to manage and no tool to learn. We offer bulk discounts when ordering multiple categories. Customized analyses are possible too. Let's have a chat!

### Thanks

A big thanks to our early customers of this service. Your feedback has been invaluable.

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