Mission: Understand Customer Sentiment to Drive E-Commerce Success

A Task from the Amazon CEO

Imagine this: You're part of a team at Amazon, and you've been tasked by the CEO, Andy Jassy, to investigate how customer sentiment impacts product ratings. In a recent meeting, he said: "Every customer review tells a story. If we can understand how people feel about our products and what drives their ratings, we can make better decisions to improve satisfaction and grow our business. I want you to analyze our review data and uncover the patterns."

Your Task

As a data scientist on this project, your goal is to analyze customer reviews and ratings to answer:

1. Is there a correlation between sentiment scores of reviews and overall product ratings?

2. What words are most associated with high or low ratings?

Using tools like *VADER Sentiment Analysis*, a natural language processing tool that measures sentiment in text (positive, neutral, negative), you'll efficiently assess the tone of thousands of customer reviews. It's an ideal choice for this project because it's specifically designed for analyzing short, opinion-based text like product reviews.

Why This Matters

Your analysis could help Amazon improve its products, refine customer experiences, and develop smarter marketing strategies– especially as the holiday season approaches. This is an opportunity to use data science to solve a real-world problem and make a measurable impact.

Github Repository Link**: https://github.com/isabellamwright/CS3-DS4002/tree/main**