Dynamic AI-Product Description Based on Marketplace Reviews

Problem Statement: Creating product descriptions based on customer reviews can optimize product listings on e-commerce platforms. The goal is to generate dynamic product descriptions using AI to enhance searchability and attractiveness to potential buyers.

Solution Overview: Build an AI-powered bot that analyzes customer reviews to generate dynamic product descriptions. This bot will study reviews to identify key keywords and attributes for optimizing product titles and descriptions.

Key Features:

1. **Review Analysis:**
   o Analyze customer reviews to identify positive and negative keywords and attributes.
   o Use Natural Language Processing (NLP) to extract relevant information from reviews.
2. **Keyword Recommendation:**
   o Suggest recommended keywords for product titles and descriptions.
   o Ensure that keywords comply with platform restrictions (e.g., character limits).
3. **Dynamic Descriptions:**
   o Generate dynamic product descriptions based on review analysis.
   o Provide suggestions for optimizing product listings.
4. **Competitor Analysis:**
   o Analyze reviews of competitor products to identify successful keywords and descriptions.
   o Benchmark against competitor listings to ensure competitive positioning..

Deliverables:

- **Web Application:** Develop a web-based application for dynamic product description generation.
- **Data Model:** Provide a detailed data model that includes keyword recommendations and insights from review analysis.
- **Dashboard:** Create an interactive dashboard for visualizing keyword trends and product descriptions.

Expected Outcomes:

1. **Optimized Product Titles and Descriptions:**
   o Suggest recommended keywords to be used in product titles and descriptions to enhance searchability and relevance.
   o Ensure compliance with platform restrictions on title length and keyword usage.
2. **Summarized Review Insights:**
   o Summarize positive and negative attributes from customer reviews to highlight key features and potential improvements. Example of a summary of

positive and neutral attributes from reviews of Farmley Apricot:

Customers say

Customers like the freshness, taste, health, and quality of the snack mix. For example, they mention it's very fresh, tasty, and a perfect blend of healthy and tasty foods. That said, opinions are mixed on the value.

AI-generated from the text of customer reviews

✅ Quality   ✅ Taste   ✅ Freshness   ✅ Health   Value

- o Provide a concise overview of what customers are saying about the product.

3. **Competitive Edge:**
   - o Benchmark against competitor products to identify and adopt successful keywords and descriptions.
   - o Stay competitive by continuously updating product listings based on current market trends.

4. **Increased Customer Engagement:**
   - o Improve product descriptions to better align with customer expectations and preferences.
   - o Enhance the overall shopping experience by providing more relevant and appealing product information.

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