

## Analyzing Consumer Preferences and Brand Differentiation in the Notebook Market via Social Media Insights and Expert Evaluations

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**Abstract :** This study investigates consumer behavior in the notebook computer market by integrating social media sentiment analysis with expert evaluations. The rapid evolution of the notebook industry has intensified competition among manufacturers, necessitating a deeper understanding of consumer priorities. Social media platforms, particularly Twitter, have become valuable sources for capturing real-time user feedback. In this research, sentiment analysis was performed on Twitter data gathered in the last two years, focusing on seven major notebook brands. The PyABSA framework was utilized to extract sentiments associated with various notebook components, including performance, design, battery life, and price. Expert evaluations, conducted using fuzzy logic, were incorporated to assess the impact of these sentiments on purchase behavior. To provide actionable insights, the TOPSIS method was employed to prioritize notebook features based on a combination of consumer sentiments and expert opinions. The findings consistently highlight price, display quality, and core performance components, such as RAM and CPU, as top priorities across brands. However, lower-priority features, such as webcams and cooling fans, present opportunities for manufacturers to innovate and differentiate their products. The analysis also reveals subtle but significant brand-specific variations, offering targeted insights for marketing and product development strategies. For example, Lenovo's strong performance in display quality points to a competitive edge, while Microsoft's lower ranking in battery life indicates a potential area for R&D investment. This hybrid methodology demonstrates the value of combining big data analytics with expert evaluations, offering a comprehensive framework for understanding consumer behavior in the notebook market. The study emphasizes the importance of aligning product development and marketing strategies with evolving consumer preferences, ensuring competitiveness in a dynamic market. It also underscores the potential for innovation in seemingly less important features, providing companies with opportunities to create unique selling points. By bridging the gap between consumer expectations and product offerings, this research equips manufacturers with the tools needed to remain agile in responding to market trends and enhancing customer satisfaction.

**Keywords :** consumer behavior, customer preferences, laptop industry, notebook computers, social media analytics, TOPSIS

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