Abstract

This research explores the use of data analytics to optimize pricing strategies in retail, focusing on how businesses can leverage data-driven insights to set competitive and profitable prices. In a rapidly changing retail environment, pricing decisions are critical for maintaining market competitiveness and maximizing revenue. Retailers are increasingly turning to data analytics to analyze customer behavior, market trends, and competitor pricing, enabling them to dynamically adjust pricing strategies. This study investigates how data analytics can be applied to optimize pricing decisions and enhance retail performance.

A mixed-methods approach is employed to provide a comprehensive understanding of how data analytics influences pricing strategies in retail. The quantitative phase involves analyzing sales, pricing, and competitor data to identify patterns and trends that can inform pricing models. Statistical techniques such as regression analysis and machine learning algorithms are used to predict the impact of various pricing strategies on sales and profitability. The qualitative phase includes interviews with retail managers, pricing analysts, and data scientists to gain insights into the practical applications of data analytics in pricing decisions, the challenges faced, and the effectiveness of different pricing strategies.

The findings from this study highlight the potential of data analytics in optimizing pricing strategies in retail. By combining data-driven insights with expert perspectives, the research offers actionable recommendations for retailers seeking to improve pricing models, increase profitability, and remain competitive in the evolving market landscape.