

A Deep Learning Approach for Predicting B2B Customers' Online Behavior

Tolunay Alankaya

The digital transformation of B2B commerce has created unprecedented opportunities to leverage customer data for business insights. This study harnesses e-commerce platform clickstream data to develop predictive models for customer visits and purchases, with particular attention to the relationship between specific click patterns and customer engagement. By implementing a deep learning model that analyzes sequential click patterns from previous visits, we can effectively identify customers at risk of platform disengagement. Our approach surpasses traditional statistical benchmarks in both accuracy and efficiency, requiring fewer historical visits to generate reliable predictions. The model also reveals valuable insights into how different click pathways influence customer behavior. This research makes dual contributions: it advances academic understanding of B2B online behavior while providing practical tools for business implementation. For practitioners, our findings offer crucial guidance on data collection strategies and platform adoption metrics during digital transformation. The results demonstrate the strategic value of clickstream analysis in B2B settings and provide a roadmap for companies navigating the shift to digital commerce.