

Towards Optimized E-Commerce: Examining Performance-Affecting Factors for Online Retail Platforms

Through A/B testing and user studies, we analyzed the impact of three experience enhancements on the conversion rates of e-commerce platforms.

Tianquan Di

Marsha Chechik

ACADEMIC SUPERVISOR

Lucas Kim

INDUSTRY SUPERVISOR

Summary of change in conversion rates across experience enhancements

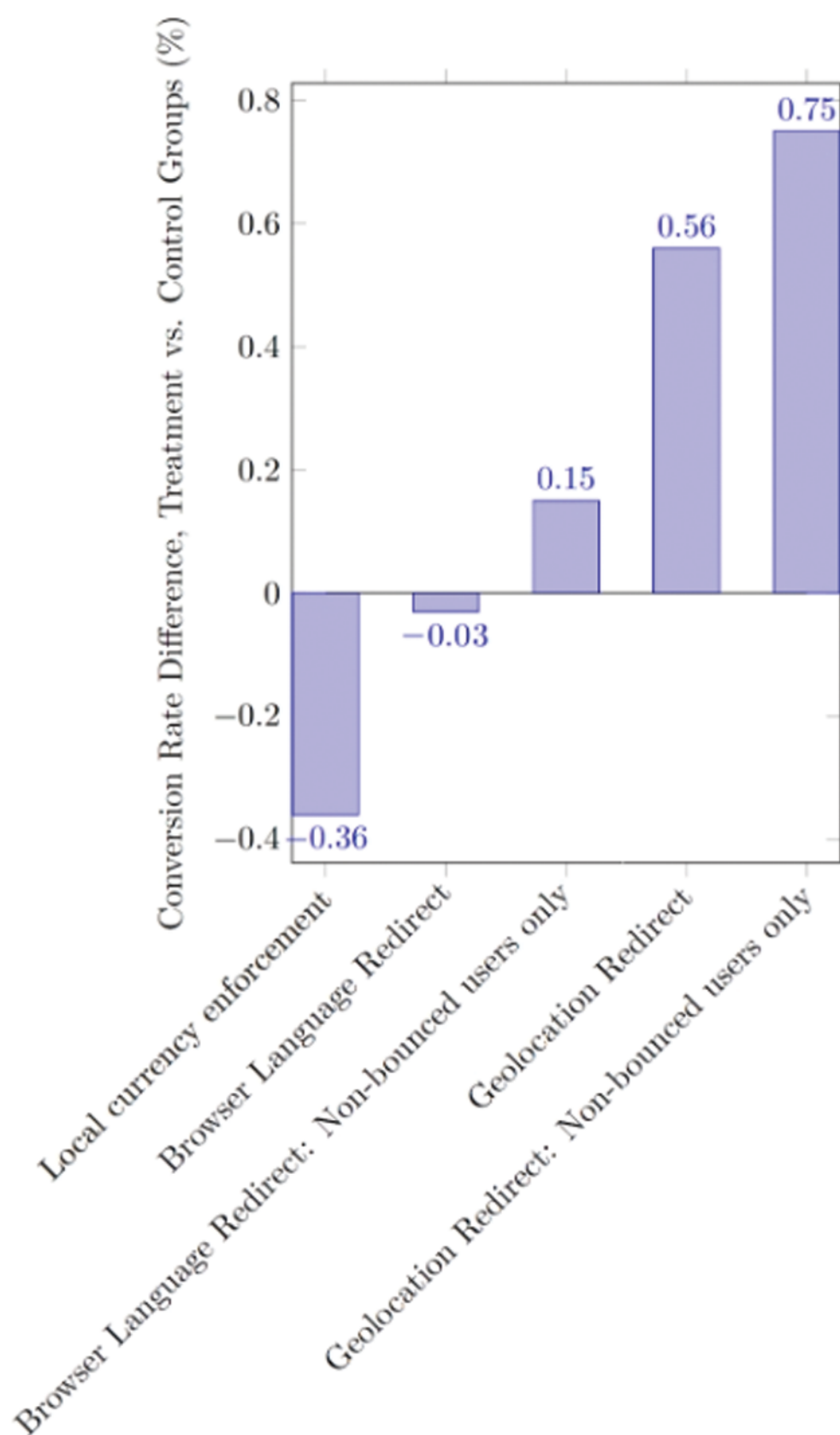
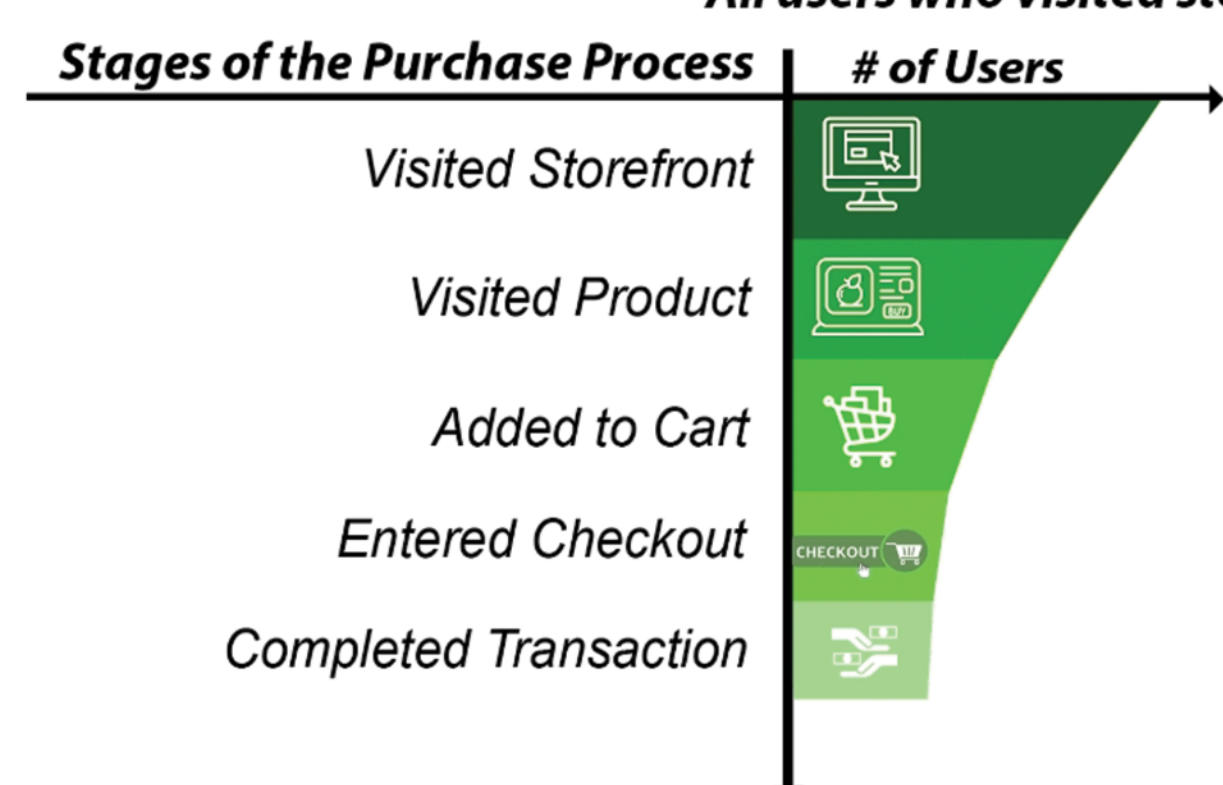


Illustration of conversion rate: $\frac{\text{Users completed transaction}}{\text{All users who visited storefront}}$



* "Non-bounced" refers to buyers that navigated to a different page on the store after entering

PROJECT SUMMARY

Cross-border e-commerce platform is pivotal for small to medium-sized businesses aiming to access a larger global market. The effectiveness of an e-commerce platform is often judged by its conversion rate, which quantifies the transition of casual browsers into paying customers. In this study, we explore the impact of three potential experience enhancements on the conversion rate. These include: (1) Local-currency enforcement: enforce users to checkout in their local currency based on the shipping address (2) Browser language redirection: automatically direct users to a version of the website tailored to their language based on the browser's request header; and (3) Geolocation redirection: automatically direct users to a version of the website tailored to their language and currency based on their geolocations. We assess the impact through A/B testing and blind user studies across all Shopify stores. Our results show that geolocation redirection provides the most positive improvement on the conversion rate.

