

CookieMedia Marketing Analytics Project

Transforming marketing data into actionable insights to
drive [conversion](#), [engagement](#), and [customer satisfaction](#)



The Triple Threat

Stagnant Conversions

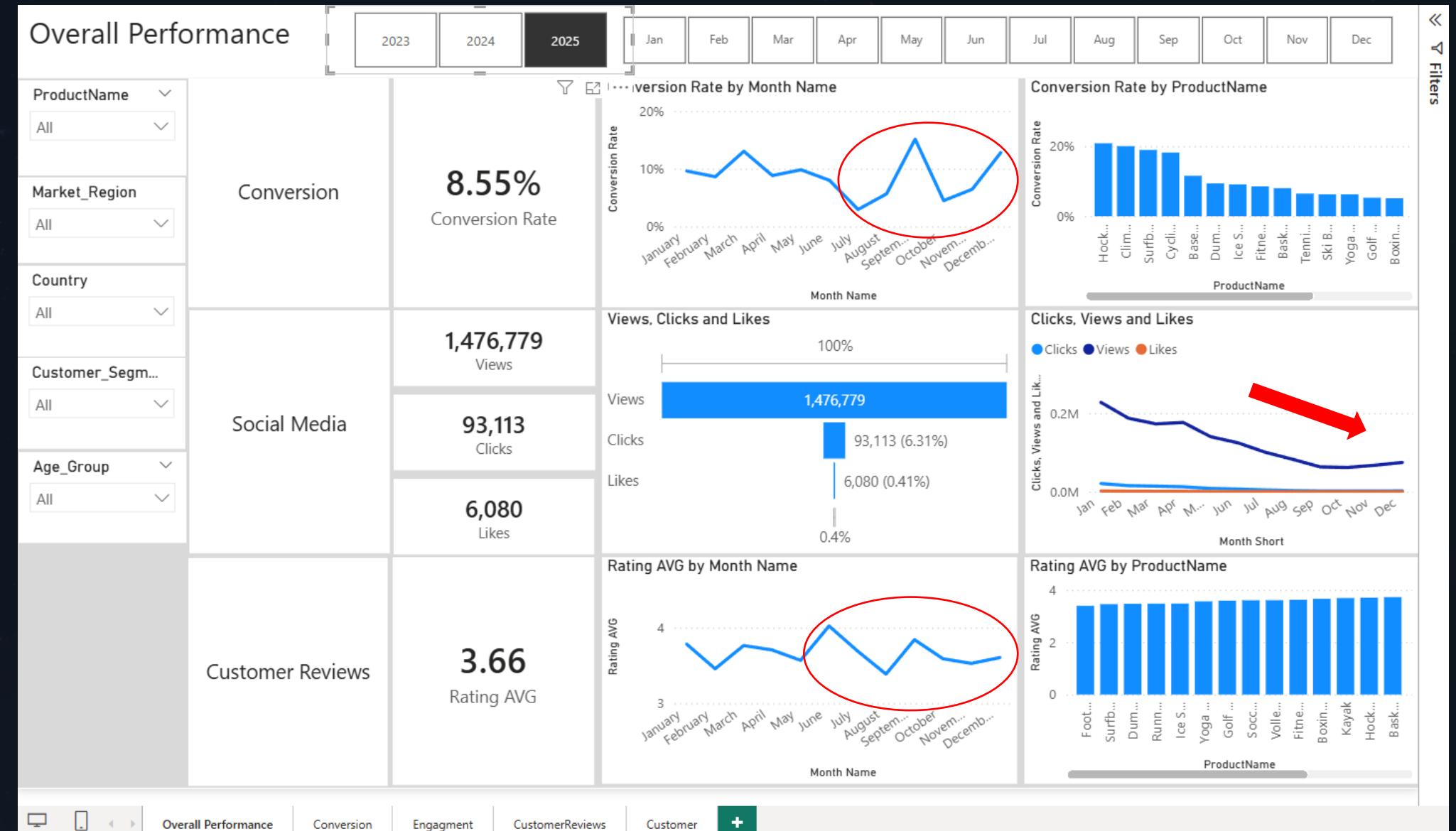
High marketing spend failing to deliver expected returns on investment

Declining Engagement

Customer interaction rates falling despite increased content production

Misalignment

Marketing content not resonating with customer feedback and needs



DATA FOUNDATION

Dataset Architecture

Five interconnected tables providing 360-degree customer journey analysis from first touch to post-purchase feedback



Customers

Demographics, segments, and behavioral profiles



Geography

Regional distribution and location-based insights



Engagement

Campaign interactions, views, and clicks



Reviews

Customer feedback and sentiment data



Journey

Purchase timeline and conversion stages

Methodology Overview



Data Understanding

Explored tables, identified key fields and relationships



Data Cleaning

Standardized formats, handled missing values, cleaned review text



Feature Engineering

Created purchase intervals, Pareto categories, sentiment labels



Sentimental Analysis in Python

Built views, performed aggregations, extracted insights



SQL Analysis

Built views, performed aggregations, extracted insights



Power BI Dashboard

Interactive Dashboard for Stakeholder Decision-Making

Three Strategic Objectives

1. Increase Conversions

Identified "Hero Products" at country level to boost conversion rates in specific markets



2. Enhance Engagement

Determined which content types drive highest engagement and marketing effectiveness



3. Improve Ratings

Analyzed sentiment at product level to reveal improvement opportunities





KEY FINDINGS

1. Increase Conversion

10

Months to Convert

Average time from first interaction to first purchase—indicating significant funnel friction

60%

Top 6 Products

Contribute 60% of total sales, qualifying as "Hero Products" for conversion campaigns

80%

Pareto Principle

Top 9 products drive bulk of revenue, enabling inventory optimization strategies

1. Increase Conversion

Overall Conversion Trend:

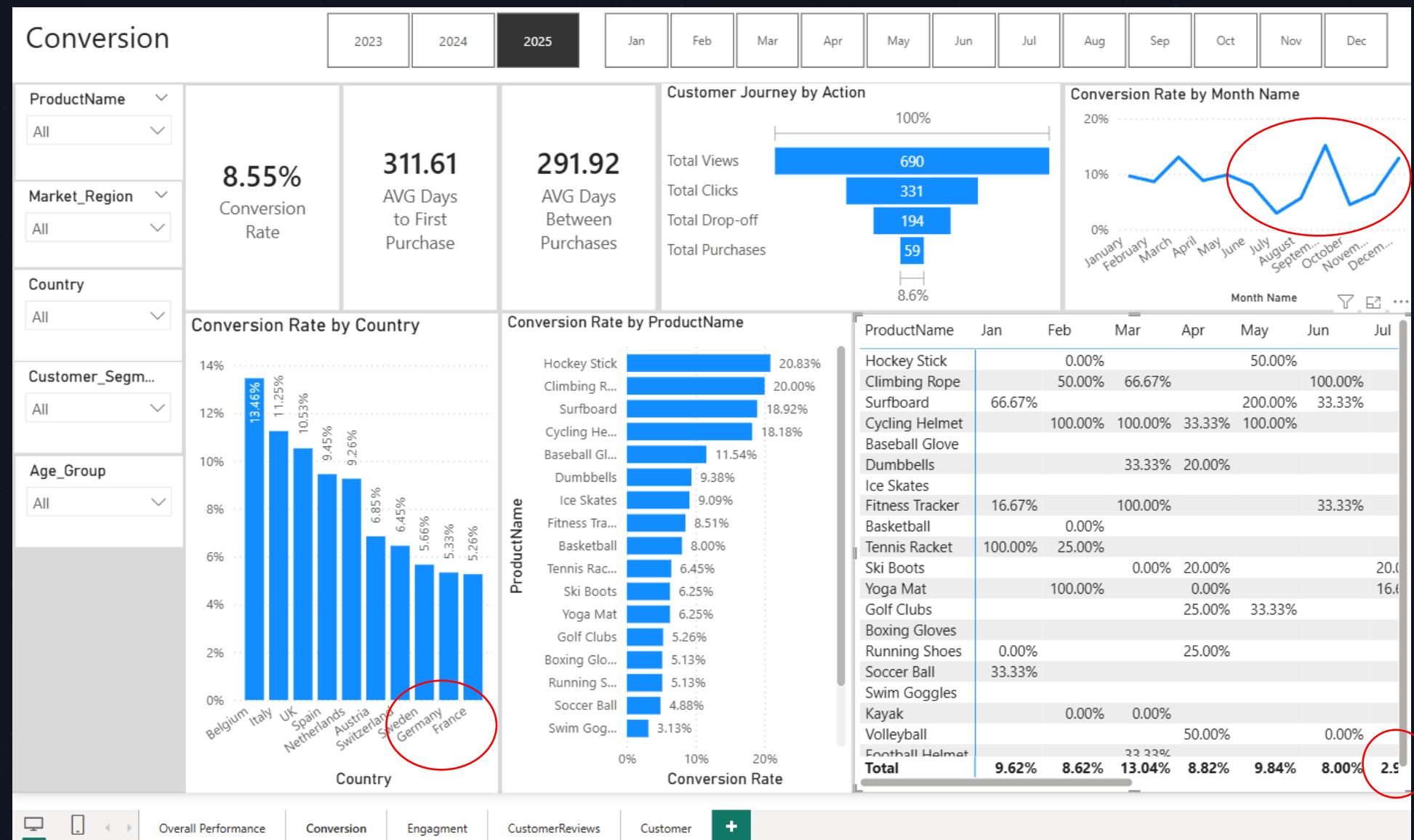
Conversion performance varied across the year, with clear peaks in March, October, and December driven by stronger engagement and purchase activity. These seasonal patterns highlight opportunities to boost weaker months through targeted campaigns, refined promotions, and improved customer touchpoints.

Lowest Conversion Month:

May showed the lowest conversion rate at **2.94%**, with no standout products. This suggests weaker marketing or engagement during the month, indicating a need to refine campaign timing, promotions, or product visibility to improve future performance.

Country Level Conversion and Hero Product Potential

Regional analysis shows clear differences in product performance. Identifying "Hero Products" for each market can guide targeted strategies and improve conversions. Strong performers in Belgium may also drive uplift in nearby markets like the Netherlands and Luxembourg, where customer behaviour is similar.



Conversion, Power BI Dashboard

2. Enhance Engagement

Conversion Efficiency by Content Type

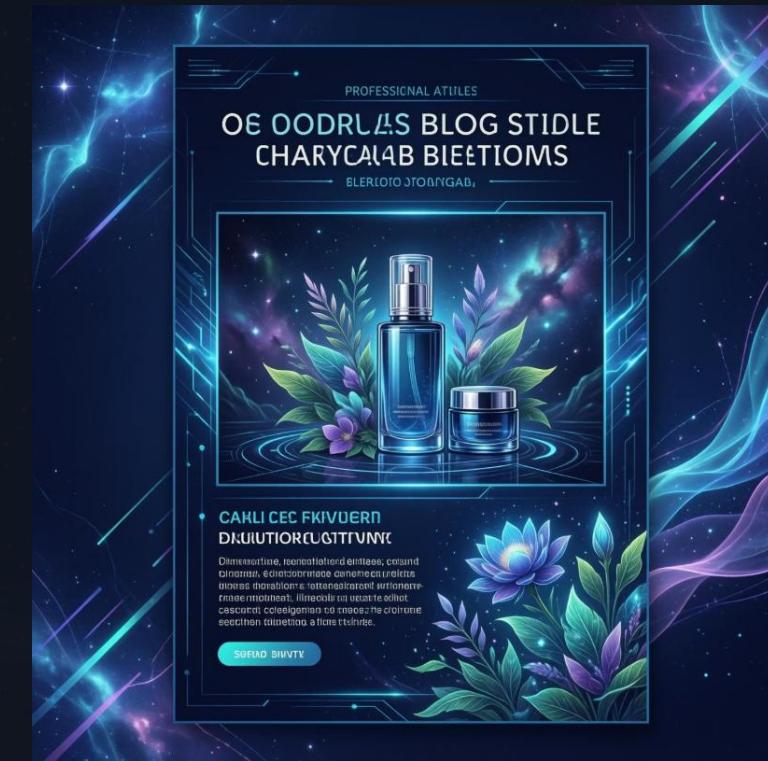
Newsletter and Video deliver highest conversion rates at 0.38 purchases per 100 views

Blog and Social Media convert at 0.35 purchases per 100 views

High-Ticket Items (£350+) perform best with **blog content**, suggesting longer consideration cycles

Top Campaign Insight

Highest-performing campaigns show fewer views but very strong conversions—indicating precise targeting and high-intent audiences





SENTIMENT

3. Customer Review Analysis

Sentiment analysis reveals critical patterns between customer satisfaction and purchase behavior

Very Negative & Negative

Highly engaged customers who buy frequently—they notice flaws quickly due to regular use

Neutral & Very Positive

Highest review counts indicating healthy, active customer base

Opportunity Zone

High neutral count suggests need for "surprise and delight" marketing to move customers toward positive sentiment



ACTION PLAN

Strategic Recommendations

01

Reduce Funnel Friction

Optimize checkout experience for "Hero Products" to recapture lost conversions and reduce 10-month conversion timeline

02

Targeted Reinvestment

Shift marketing budget toward Newsletters and Video for general conversion; use Blogs for high-ticket items

03

Reputation Management

Proactively address negative feedback on top-performing products to protect core revenue streams

04

Inventory Optimization

Prioritize "Top 80%" items to prevent stockouts; focus marketing on "Bottom 20%" to clear slow-moving stock