

User Funnel Analysis & Conversion Optimization

Professional project brief for a Data Analyst portfolio (event-based funnel analytics).

Date: January 21, 2026

Project Theme: E-commerce conversion funnel

This brief defines the business context, problem statement, funnel stages, and the decision-making questions the analysis must answer before any data cleaning or modeling begins.

One-line goal: Identify where users drop off in the purchase journey and which segments contribute most to lost conversions.

1. Business Context

An e-commerce company acquires users through paid advertising, social media, referral partnerships, and organic search. Traffic is steady (or growing), but revenue is not increasing at the same pace. This suggests users are disengaging before completing purchases.

2. Core Business Problem

Locate the biggest leakage points in the end-to-end conversion journey, quantify drop-offs between stages, and isolate the segments (device, source, location) most associated with churn inside the funnel.

3. Why Funnel Analysis (not just sales totals)

Sales numbers report outcomes but do not explain user behavior. Funnel analysis connects user actions across an ordered journey so the team can see where friction occurs and prioritize fixes that improve conversion efficiency.

4. Funnel Stages and Business Meaning

Stage	Business meaning	Typical friction signals
Visit	Marketing acquisition worked	Low-quality traffic, mismatched landing page
View Product	Interest in product/category	Poor page clarity, slow load, weak trust cues
Add to Cart	Intent to buy exists	Price sensitivity, unclear shipping/returns
Checkout	High intent, decision moment	Form friction, forced login, payment failures
Purchase	Revenue realized	Final payment confidence / drop at payment

5. Key Business Questions

- What percentage of users move from one stage to the next (step conversion rate)?
- Which stage has the highest drop-off and how large is it?
- Do drop-offs vary by device, traffic source, or location?
- Which segment delivers the best conversion and should receive more budget or UX focus?
- What is the single most impactful improvement opportunity (largest leakage x highest intent stage)?

6. Expected Business Outcome

The analysis should produce prioritized, evidence-based recommendations (e.g., checkout simplification on mobile, payment method expansion, or campaign targeting changes). The goal is to improve conversion rate and reduce wasted acquisition spend.

7. Problem Statement (portfolio-ready)

This project analyzes user behavior across an e-commerce conversion funnel to identify drop-off points and segment-level conversion differences. The results inform data-driven decisions for improving user experience, marketing efficiency, and overall conversion rate.