

Case Study: Drop in Sales for an E-commerce Platform

Background:

You've been hired as a Business Analyst by **ShopKart**, a mid-sized e-commerce company that specializes in electronics, clothing, and home goods. The company has been growing steadily for the past 3 years, but over the last **3 months**, there has been a noticeable **15% drop in sales** compared to the same period last year.

Initial Data Provided:

Website traffic has remained **constant**.

Conversion rate dropped from **2.8% to 2.1%**.

Customer complaints have increased by **25%**.

Average order value (AOV) has dropped slightly, from **\$75 to \$70**.

A **new version of the website** was launched 4 months ago.

A key competitor has recently launched a **major discount campaign**.

Your Task:

As the Business Analyst, provide a **structured approach** to solving this problem. Your response should include:

Problem Statement

Possible Hypotheses (what could be causing the drop in sales?)

Data to Analyze (what data would you request?)

Analysis Plan (how would you approach the investigation?)

Potential Solutions (based on likely findings)

Metrics for Success (how would you measure improvement?)

Problem Statement

ShopKart, a mid-sized e-commerce company, has faced a **15% drop in sales** over the last three months compared to the same period last year. Key metrics indicate several issues:

- **Conversion Rate:** Decreased from 2.8% to 2.1%
- **Average Order Value (AOV):** Dropped from \$75 to \$70
- **Customer Complaints:** Increased by 25%
- **Website Changes:** A new version launched four months ago
- **Competition:** A major competitor initiated a discount campaign

Hypotheses (Root Cause Exploration)

1. **Website Usability (UX/UI):** The recent redesign may have led to usability issues, causing drop-offs in the buying funnel.
2. **Increased Competition:** Pricing and offers from competitors could be diverting customers.
3. **Checkout Process Complexity:** The purchase process might have become more complicated or buggy, affecting conversions.
4. **Customer Trust/Satisfaction:** A rise in complaints suggests decreased customer trust or satisfaction.
5. **Product Pricing:** Prices may now be uncompetitive following the redesign or due to an outdated pricing strategy.

Data Requirements & Analysis Plan

1. **User Behavior Analytics:**
 - Conduct a funnel analysis tracking sessions to checkout.
 - Analyze bounce rates, session times, and exit points, especially on critical pages.
 - Use heatmaps and clickmaps for homepage, category, and checkout insights.
2. **Customer Feedback & Complaints:**
 - Categorize complaints, focusing on delivery, quality, price, and UI.
 - Identify sentiment trends through metrics like NPS and CSAT.
 - Correlate feedback with web pages and sessions.
3. **Technical Performance Data:**
 - Monitor load times, broken links, and page errors.
 - Compare behaviors between mobile and desktop users.
4. **Competitor Intelligence:**
 - Conduct price comparisons on key SKUs.
 - Analyze competitor advertising and campaign strategies.
 - Review product differentiation and customer feedback.
5. **A/B Testing and Session Recordings:**
 - Run A/B tests comparing old and new UI for checkout and product detail pages.
 - Review session recordings to identify behavioral friction points.

Findings (Hypothetical Based on Common Patterns)

- Increased cart abandonment post-redesign due to added steps and unclear calls to action (CTA).
- Product pages may feature fewer visible discounts compared to competitors.

- Complaints regarding navigation difficulties and payment failures are rising.
- Mobile user conversion rates are lower than desktop, possibly indicating responsive design flaws.
- Pricing on high-volume items could be 10-15% higher than a key competitor.

Recommendations

- 1. Improve UX/UI Based on Data:**
 - Redesign the checkout flow to reduce friction with fewer clicks and better visuals.
 - Enhance product page layouts with prominent CTAs and trust badges.
- 2. Launch Strategic Campaigns:**
 - Implement flash sales, bundled offers, and competitor-matching discounts.
 - Retarget cart abandoners with personalized email campaigns.
- 3. Enhance Customer Experience:**
 - Boost customer support with 24/7 live chat and self-service tools.
 - Prioritize faster resolution times for customer inquiries.
- 4. Mobile Optimization:**
 - Audit and rectify mobile responsiveness and payment issues.
 - Utilize AMP for faster product browsing experiences.
- 5. Implement Loyalty and Referral Programs:**
 - Reward repeat customers with point systems or early sale access.
 - Encourage referrals through bonus credits.

Metrics for Success (KPIs)

Metric	Baseline	Target (Next 6 Months)
Conversion Rate	2.1%	2.6%
Average Order Value (AOV)	\$70	\$75
Customer Complaint Volume	+25% YoY	Reduce by 40%
Cart Abandonment Rate	70%	Below 55%
Sales Growth	-15% YoY	+5% YoY recovery