Startup — Sales Performance & Customer Retention Case Study

Role: Junior Data Analyst
Duration: 3 months
Tools: Shopify (data source), Power BI, Excel, basic SQL (data prep)
Audience: Product / Growth Lead, Co-founders

Executive Summary

A B2B cosmetics startup engaged me to analyze merchant performance across two sales channels — B2B (wholesale) and drop shipping — with a central strategic goal: go deeper with existing customers rather than prioritizing acquisition. The company set a target of 10 customers placing at least one order per day. I built a KPI-driven Power BI dashboard, performed churn and purchase-frequency analysis, and ran a feasibility study on an educational content initiative. My analysis uncovered the channel most likely to hit the target and produced recommendations that prevented an expensive, high-risk initiative.

Problem Statement

The startup needed to move beyond one-off orders and increase repeat purchase behavior. Key questions were:
- Which channel (B2B vs drop shipping) better supports deepening customer relationships?
- What are the retention and order-frequency dynamics?
- Would launching educational content help merchants increase orders, and was that feasible given limited team capacity?

Approach & Methods

- Data ingestion & cleaning — Extracted transaction and customer records from Shopify; cleaned and unified fields (dates, channel tags, customer IDs), handled missing values, and created derived metrics (order counts per customer, recency, frequency).
- KPI design — Designed KPIs aligned with the company goal: daily active merchants, average orders per merchant, AOV by channel, weekly retention, 30-day churn, and purchase frequency distribution.
- Dashboarding — Built an interactive Power BI dashboard showing channel segmentation, retention funnels, monthly sales trends, and frequency histograms to make insights accessible to non-technical stakeholders.
- Customer feedback loop — Conducted structured follow-up calls with a sample of merchants to validate hypotheses (qualitative complement to quantitative findings).
- Feasibility / scenario analysis — Produced a two-scenario (best / worst case) study for launching educational content and recommended a pilot-first approach.

Key Findings (data + qualitative)

- Drop shipping showed stronger potential to increase repeat orders. B2B customers (pharmacies, beauty centers) were already served via agents, making direct deepening harder.

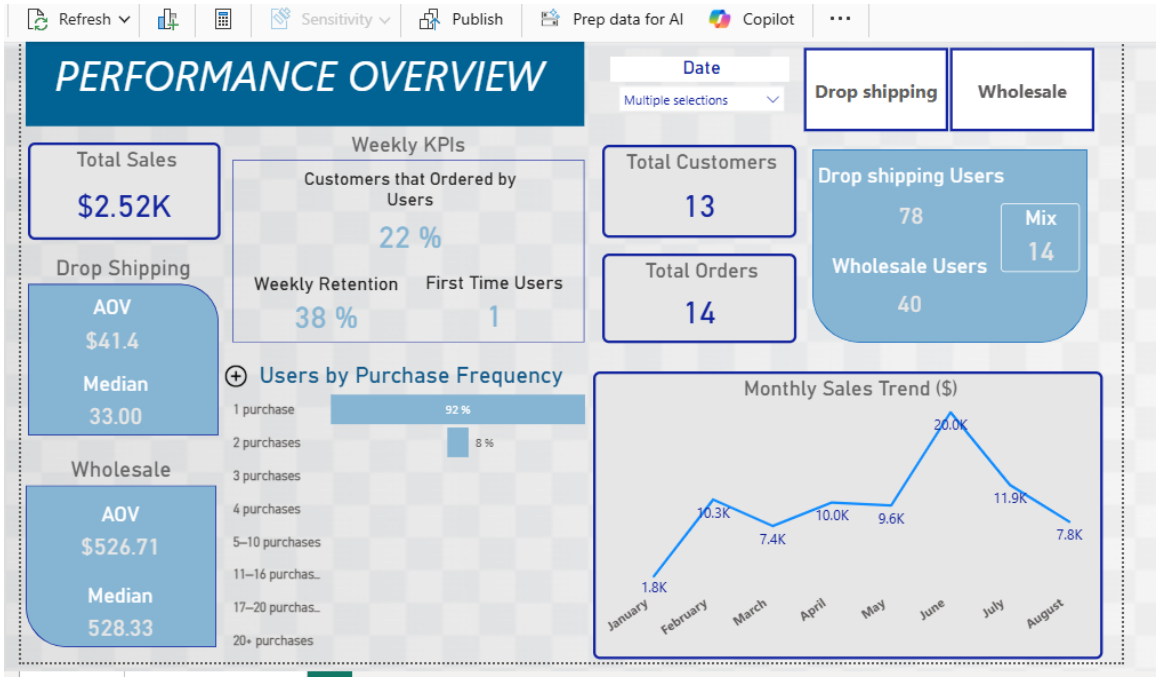
- High one-off purchase rate: 92% of users purchased only once — a clear signal for post-sale engagement focus.
- Retention & activity: weekly retention 38%; active returning customers 22% (KPIs used to track progress toward the "10 customers/day" goal).
- Customer interviews: drop shipping merchants lacked sales and product-knowledge skills and expressed willingness to learn — suggesting education could work, but adoption and resource costs were a concern.
- Feasibility study outcome: Best-case could lift avg. daily orders/merchant from 0.4 → 1.0 and materially reduce churn; worst-case involved low adoption and a heavy resource drain. Leadership decided not to pursue education at scale due to capacity & risk.

Impact & Deliverables

- Delivered a Power BI dashboard that stakeholders used to monitor retention and channel performance (visuals: frequency distribution, monthly trend, channel AOV).
- Identified drop shipping as the primary channel to pursue for depth strategies, enabling leadership to reallocate limited resources.
- Produced an evidence-based educational-content feasibility report that prevented an expensive, low-ROI investment and recommended a pilot approach if revisited.
- Built a reproducible analysis process (data ingest → KPIs → dashboard) that can be extended for future experiments.

Skills Demonstrated

- Data preparation & ETL: Shopify extraction, cleaning, date normalization, derived metrics.
- Analysis & modeling: Churn analysis, purchase-frequency cohorts, KPI selection aligned to business goals.
- Visualization & storytelling: Power BI dashboard design focused on actionability for non-technical stakeholders.
- Product thinking & experimentation: Feasibility modeling (best/worst case) and pilot-first recommendations.
- Stakeholder communication: Synthesizing quantitative results with merchant call insights to shape strategic decisions.



SAMA Educational Content Launch – Best vs Worst Case

Best Case Scenario – High-Impact Outcome (3–6 Months)

- Rapid Merchant Skill Growth → Higher Order Frequency: Avg. daily orders per merchant rises from 0.4 → 1.0 (+150% uplift in total volume).
- Retention Boost: 30-day churn drops from 25% → 12%; merchants completing 50%+ of content have 2× repeat purchase rate.
- Brand Perception & Loyalty: SAMA perceived as a partner; NPS up +10 points; organic referrals increase.
- Upsell Opportunities: 'SAMA Academy' graduates move to premium plans, +20% ARPU.

Worst Case Scenario – Low-Impact Outcome (3–6 Months)

- Low Adoption: <15% of merchants regularly consume content; drop-off after week 2.
- Minimal Behavior Change: Orders per merchant move from 0.4 → 0.45; churn stays ~25%.
- Resource Drain: 100+ staff hours/month spent on content creation and integration.
- Opportunity Cost: Education focus delays other high-impact projects; competitors launch stronger incentives.

Risk Mitigation Recommendations

- Pilot First: Test with small cohort for 30 days before full launch.
- Micro-Content: Use 2–3 min videos or swipeable carousels, not long webinars.
- Track Leading KPIs: Monitor completion rate, 7-day reorder rate, churn delta.
- Tie to Rewards: Example – complete 5 lessons → 5% off next order.