**Supply Chain Analytics Report**

**Executive Summary**

Over 24 months, our supply chain moved 5,000 shipments, generating $171K–$176K in revenue, a two-year overview of shipments, revenue, and product categories across multiple regions from August 2022 to July 2024. With 5,000 total shipments in scope, this report uncovers:

* **The Australia Paradox**: Highest returns (7x Canada’s rate) despite strong revenue—a $25K annual liability.
* **The 63% Completion Gap**: Nearly 40% of shipments stuck in “active” or returned statuses, delaying revenue recognition.
* **Category Power Laws**: Electronics drive 46% of revenue, while Office Equipment lags—a $58K inventory optimization opportunity.
* **The Human Factor**: Top sales reps achieve **92% completion rates** vs. 50% for underperformers, highlighting training gaps.

Business Context & Objectives

**Context**

* Managing shipments that contain multiple orders can be complex—requiring real-time visibility into in-transit statuses, returns, and delivered goods.
* Over a two-year period (Aug 2022–July 2024), analyzing these metrics helps detect seasonal patterns, regional challenges, and product demand shifts.

**Objectives**

* **Monitor** shipping performance (active vs. returned vs. completed).
* **Track** revenue across months, categories, and regions to guide sales and logistics strategies.
* **Identify** high-return regions (Australia) and success stories (Canada’s low returns).
* **Empower** teams with date, region, and category filters to isolate root causes of returns or dips in revenue.

**Stakeholders**

* **Logistics/Operations Managers**: Oversee shipment flow, address returned shipments.
* **Sales & Marketing**: Evaluate monthly revenue spikes or dips, plan promotions.
* **Executives**: Make strategic decisions on expansions, supplier negotiations, or process improvements.

Dataset & Methodology

**Data Sources**

* **Internal ERP** or **order management** system logs for shipments.
* **Sales data** for monthly revenue, categorized by product line (Audio, Electronics, Office Equipment).
* **Enriched**: Carrier performance metrics (FedEx, DHL), customer feedback surveys.

**Time Frame**

* **August 2022** to **July 2024**, enabling a near two-year historical and partial forecast window.

**Key Insights**

**A. Australia’s Return Crisis**

* **6.8% Return Rate (vs. 1.1% in Canada).**
* **Root Cause:**
  + Last-Mile Delays: 23% of Australian shipments arrive 5+ days late vs. 7% in Canada.
  + Product Mismatch: 61% of returns are Electronics—likely damaged in transit due to fragile packaging.

**Category Power Dynamics**

* Electronics: 46% revenue share but 68% of returns.
* Office Equipment: 22% revenue, 9% returns—untapped potential for promotions.

**D. Sales Rep Performance Chasm**

* Top 10% Reps: 92% completion rates, $14K/month revenue.
* Bottom 20%: 50% completion, 4x return rates.

**Recommendations**

**A. Reduce Returns in High-Return Regions**

* **Focus on Australia: Investigate reasons for returns (quality checks, shipping damage, local preferences).**
* **Offer improved tracking or local warehousing to speed up deliveries and reduce dissatisfaction.**

**B. Optimize Shipment Processes**

* **If 62% completion is below the company’s goal, refine logistics scheduling or partner with more reliable carriers.**
* **Implement real-time alerts for delayed shipments to prevent potential returns.**

**C. Align Inventory & Marketing with Leading Categories**

* **If Electronics or Audio are top revenue drivers, maintain robust stock levels.**
* **Consider targeted marketing for lesser-known categories to balance inventory turnover.**

**D. Sales Team Development**

* **Recognize top performers with fewer returns.**
* **Provide training or revised selling strategies for reps with high returns to ensure product-customer alignment.**

**Conclusion**

1. Localizing logistics in high-risk regions,
2. Empowering reps with data-driven incentives,
3. Reimagining category-specific strategies,