

# Urban Decay Cosmetics Supply Chain Optimization

Transforming challenges into strategic advantages through data-driven insights

By

Bukola Adesuji



# The Growth Challenge

Urban Decay's rapid expansion across U.S. markets has created unprecedented demand, but success has brought new complexities. While customers love the products, rising shipping costs, frequent stockouts, and delivery delays are threatening the brand's reputation.

Leadership recognized that their supply chain needed strategic attention to support sustainable growth and maintain customer satisfaction.

### Critical Issues Identified

#### Stockout Risk

High-demand SKUs showing low availability despite strong order volumes, creating lost sales opportunities

#### Supplier Dependency

Over-reliance on Supplier 3 (63,000+ units) creates vulnerability to disruptions

#### **Quality Concerns**

Defect rates exceeding 200% threaten product integrity and customer trust

# Urban Decay PivotTable

tow Labels	Average of Shipping costs			Average of Manufacturing lead time		
Route A	5.70		5.48	14.78	488	
loute C	5.52					
Route B	5.25					
			5.48	14.78	488	
tow Labels	Average of Lead times					
loute C	16.05					
Route A	15.96					
Route B	15.30					
Average of Lead times	Column Labels					
low Labels		Route A	Route B			
upplier 1	13.96	16.09				
Supplier 2	15.69	15.52				
Supplier 3	16.08	14.03				
	18.78	16.34				
upplier 4						
upplier 5	16.57	17.91	15.67			
Average of Shipping costs	Column Labels					
tow Labels	₹ Route A	Route B	Route C			
upplier 1	6.10	5.20	5.14			
Supplier 2	5.69	4.83	5.53			
upplier 3	5.51	5.42	5.81			
upplier 4	5.62	5.04				
Supplier 5	5.81	5.77				
tow Labels	Average of Defect rates	Average of Manufacturing lead time				
upplier 1	2.80	14.73				
Supplier 3	2.72	14.49				
upplier 2	2.60	14.20				
upplier 5	2.53	14.60				
upplier 4	2.35	16.35				

# Dashboard For Insights and Visualization



# Operations Overview

488

14.8

\$5.48

Total SKUs

Products analyzed across the entire portfolio

Avg Lead Time

Days for manufacturing processes

**Avg Shipping Cost** 

Per unit across all routes and modes

\$475

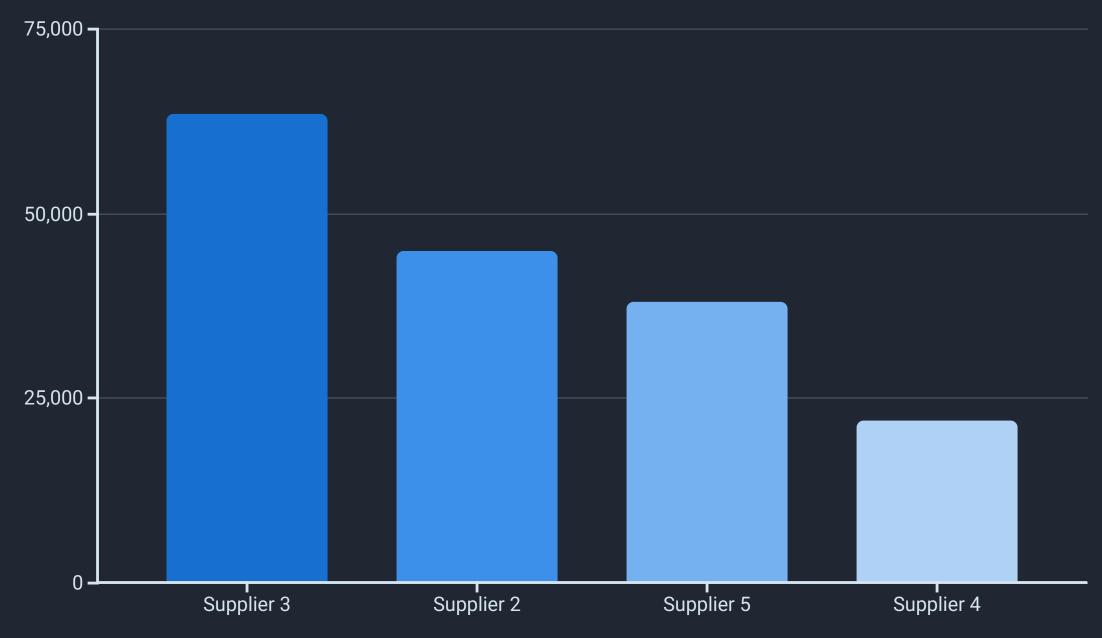
Avg Profitability

Per SKU with wide variation by product type



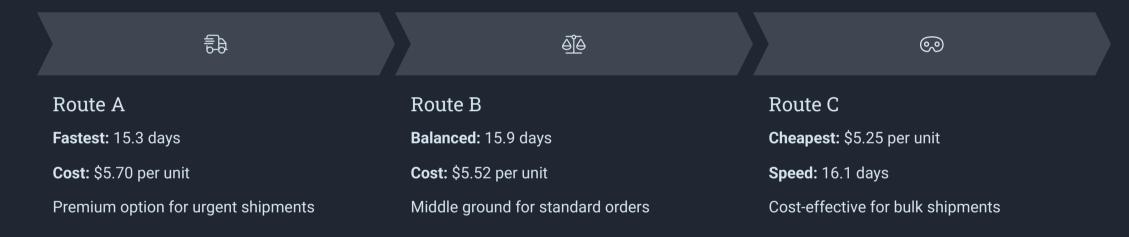
# Supplier Performance Analysis

The data revealed significant imbalances in supplier relationships that create both opportunities and risks for Urban Decay's operations.



Heavy reliance on Supplier 3 creates a critical dependency risk, while Supplier 4's low volume and slower lead times indicate need for performance improvement or reassessment.

# Shipping Route Trade-offs



Clear cost-speed trade-offs require strategic allocation based on market priorities and product margins.

# Transportation Mode Comparison

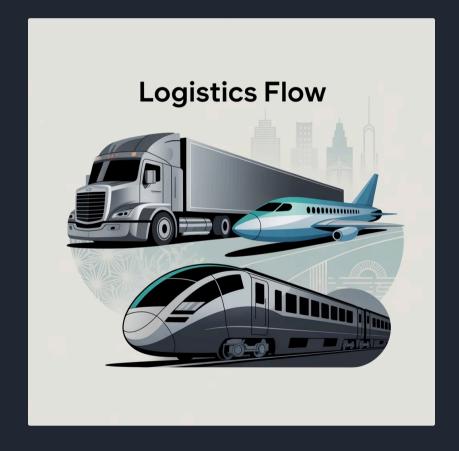
1 Air Transport

Cheapest option at \$5.39 per unit, but may have capacity constraints for large volumes 2 Road Transport

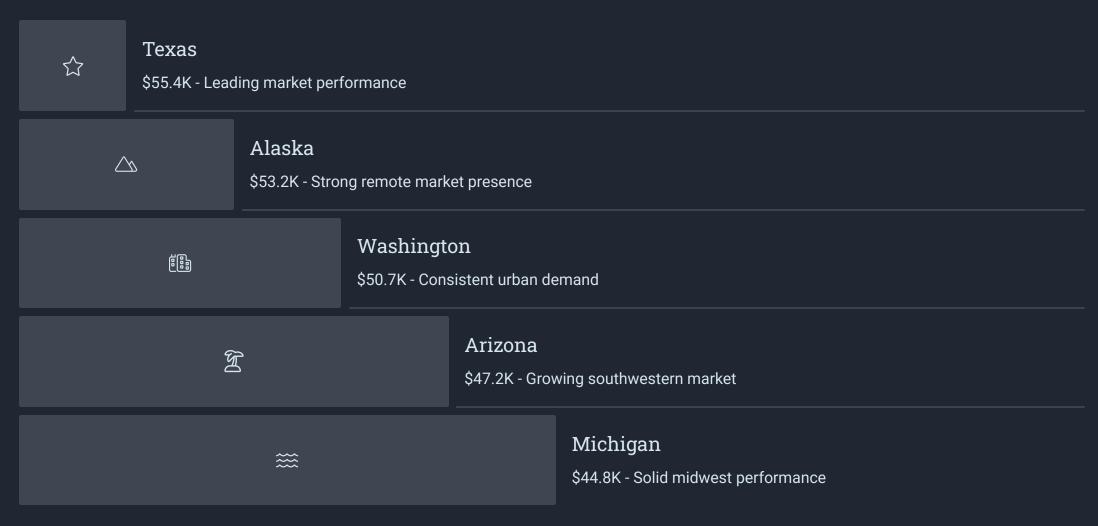
Balanced middle option at \$5.48 per unit with reliable capacity and flexibility

3 Rail Transport

Most expensive at \$5.54 per unit, suitable for specific route requirements



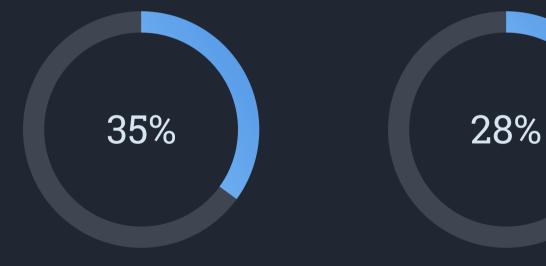
# Top Revenue Markets



Texas and Alaska represent critical growth markets requiring prioritized supply chain attention to protect revenue and brand reputation.

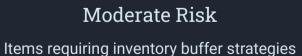
### Stockout Risk Assessment

Several high-demand SKUs show dangerous inventory imbalances that threaten sales performance and customer satisfaction.



Products with critically low availability despite strong demand

High Risk SKUs





37%

## Strategic Recommendations



#### Optimize Route Usage

Prioritize Route A for Texas & Alaska (highest revenue), use Route C for bulk shipments to balance cost and service



#### **Diversify Suppliers**

Reduce dependence on Supplier 3 by reallocating volumes to Suppliers 2 & 5, improve or replace Supplier 4



#### Strengthen Quality Control

Validate defect rate metrics, implement standardized inspection reporting and supplier quality audits

# Profitability-Driven Shipping Strategy

#### Premium SKUs

- Route A (fastest delivery)
- Air transport priority
- Texas & Alaska focus
- Enhanced quality checks

#### Standard SKUs

- Route B (balanced option)
- Road transport efficiency
- Cost-optimized delivery
- Bulk shipment strategies

Aligning shipping modes with product margins ensures optimal resource allocation while maintaining customer satisfaction across all market segments.



# Risk Management & Scenario Planning



#### **Supplier Disruption**

What-if modeling for Supplier 3 failure scenarios and contingency activation plans



#### **Cost Fluctuations**

Impact analysis of 10% freight cost increases across different transportation modes



#### Safety Stock

Strategic inventory buffers for high-risk SKUs to cushion demand shocks



# Implementation Roadmap

Phase 1: Immediate Actions

Validate defect rate data, implement Route A for Texas/Alaska, begin Supplier 4 performance review

Phase 2: Strategic Shifts

Rebalance supplier volumes, establish quality audit protocols, develop safety stock strategies

Phase 3: Optimization

Deploy predictive analytics, complete scenario planning models, establish continuous improvement processes

## **Expected Impact**

Implementing these strategic changes will transform Urban Decay's supply chain from a cost center into a competitive advantage that drives sustainable growth.



#### Reduced Risk

Diversified supplier base eliminates single points of failure and strengthens operational resilience



#### **Enhanced Quality**

Improved quality control processes reinforce customer trust and brand reputation



#### **Smarter Decisions**

Data-driven shipping allocation protects revenue in top markets while optimizing costs elsewhere



#### Scalable Growth

Optimized supply chain becomes a strategic enabler for future expansion and market penetration

# Strategic Success

Urban Decay's supply chain transformation represents more than operational efficiency; it is about building a foundation for sustainable growth, customer satisfaction, and market leadership in the competitive beauty industry.

By addressing supplier dependencies, optimizing shipping strategies, and implementing robust quality controls, Urban Decay positions itself to scale confidently while protecting profitability and brand reputation.

