# Supply Chain Analytics Dashboard

Advanced Statistics Project

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**Sam Collin Allen Joseph Sahaya Jude**
**Yogesh Muthukumar**

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Montpellier Business School

# Agenda

# Introduction

## Project Overview

- Developed an interactive Streamlit dashboard for supply chain analytics.
- Analyzed large-scale global supply chain data.
- Extracted key performance indicators related to delays, profit, and geography.
- Applied statistical methods to interpret operational insights.

# Dashboard Overview

# 📦 Supply Chain Analytics Dashboard

## 📊 Key Metrics

| Total Orders | Average Profit | Late Delivery (%) |
| --- | --- | --- |
| 180519 | 21.97 | 57.28 |

# Key Metrics

## Key Performance Indicators

- **Total Orders:** 180,519
- **Average Profit per Order:** 21.97
- **Late Delivery Rate:** 57.28%
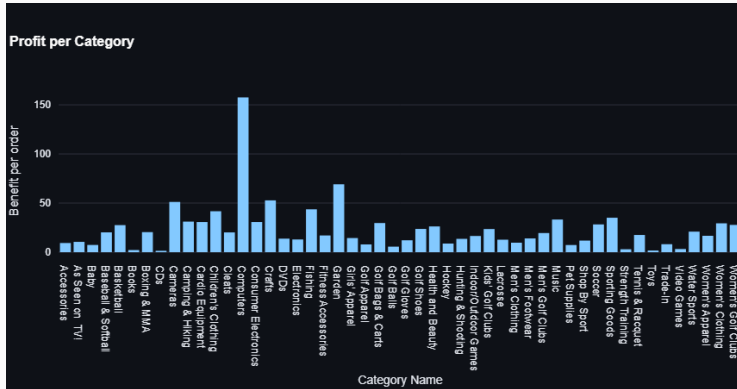- **Most Profitable Category:** Computers

# Timeline

- Order
- Processing
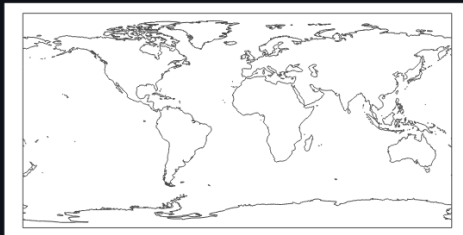- Shipping
- Delivery

# Visual Analytics

# Profit by Category

# Delivery Delay Distribution

Late Deliveries (%) by Country

# Summary

## Key Insights

### Operational Findings

- Delivery delays affect more than half of all orders.
- Profitability varies significantly across product categories.
- Country-level performance exposes major bottlenecks.

### Dashboard Advantages

- Interactive KPI tracking.
- Clear, interpretable data visualizations.
- Geographic insights for strategic decisions.

# Team

## Team Members

**Sam Collin Allen Joseph Sahaya Jude**

- Data Cleaning & Preparation
- KPI Engineering
- Dashboard UI Development

**Yogesh Muthukumar**

- Exploratory Data Analysis
- Visualization & Insights
- Report & Presentation Lead

# Conclusion

## Conclusion

- The dashboard highlights critical improvement areas in supply chain operations.
- Delivery delays present an opportunity for major optimization.
- Product-level profitability insights support strategic planning.
- Future Enhancements:
  - Predictive models for delay forecasting
  - Real-time API integration
  - Automated anomaly detection

# Thank You!

Questions?