# Supply Chain Risk Management Dashboard – GlobalLogiX

Power BI Skill Test Presentation

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# Understanding GlobalLogiX: Our Foundation and Challenges

**GlobalLogiX** is a multinational leader in supply chain management, orchestrating the complex flow of goods from procurement to warehousing, logistics, and returns. Our global footprint demands precision and resilience in every operation.

## Key Operational Challenges:

- Supplier risks jeopardizing sourcing continuity.
- Shipment delays impacting delivery schedules and customer satisfaction.
- Inventory shortages leading to missed sales opportunities.
- High return costs eroding profitability.

# Supplier Risk Deep Dive: Identifying Critical Vulnerabilities

## Overall Risk Score

Average supplier risk score is **74.44**, indicating a moderately high level of potential disruption within our supplier network.
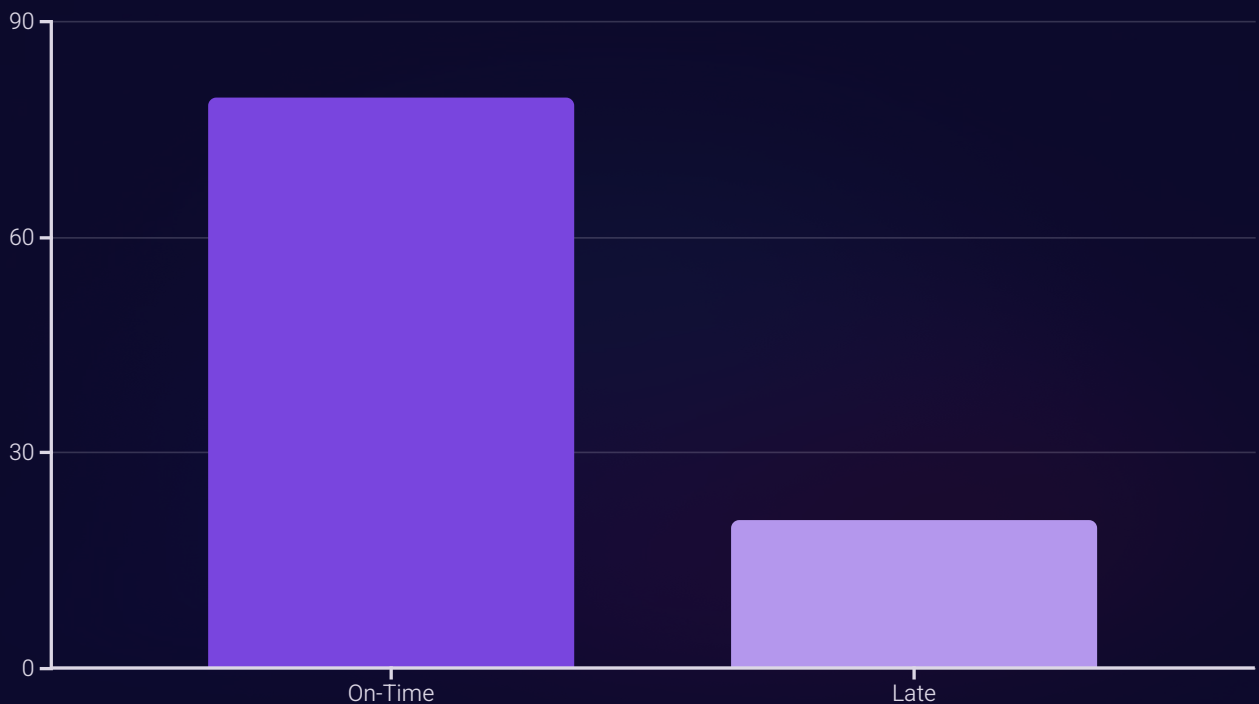
## Critical Suppliers Flagged

Several suppliers exhibit a risk score **> 80** and a reliability rating of **1** (lowest), categorizing them as critically high risk.
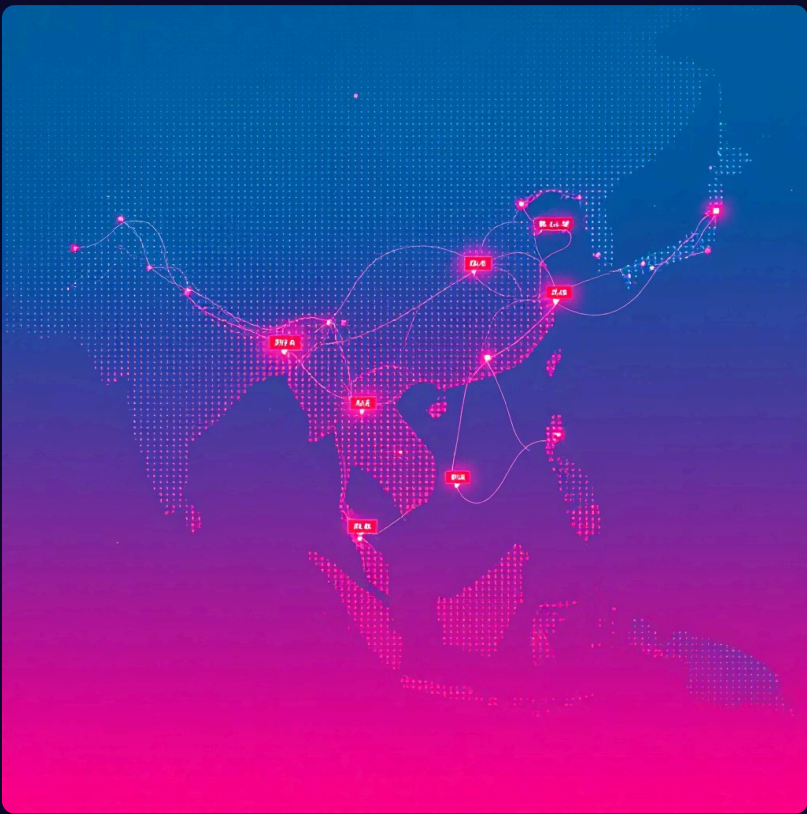
## Geographic Concentration

High-risk suppliers are geographically diverse, concentrated across key regions including **China, and Germany**, demanding a multi-faceted mitigation strategy.

# Shipment Performance: Unpacking Delays



While the average delay is only **1.02 days**, a significant **20.54% of all shipments** are arriving late. This means 1 in 5 shipments experiences delays, impacting overall efficiency and customer satisfaction.

## Regional Impact:

Regions like **China** show a disproportionately higher impact from shipment delays compared to our operations in Europe and the US, indicating a need for targeted logistical improvements.

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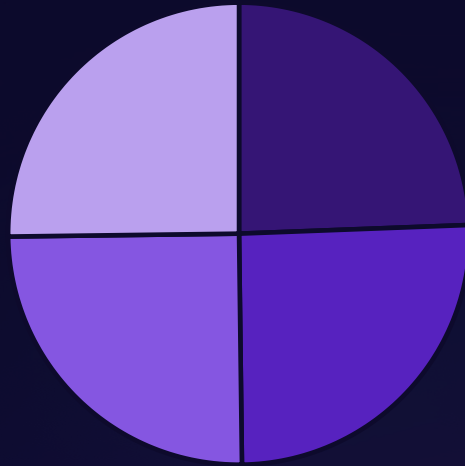# Inventory Stock Monitoring: Proactive Stock-Out Prevention

Our analysis reveals critical low stock levels at several key warehouses, posing a significant risk of stock-outs and potential disruptions to our supply chain. Proactive replenishment planning is essential to maintain operational fluidity.

| | |
|---|---|
| **1** | **Warehouse W0167** <br> Flagged for low stock, requiring immediate attention. |

| | |
|---|---|
| **2** | **Warehouse W0332** <br> Inventory below minimum threshold. |

| | |
|---|---|
| **3** | **Warehouse W0419** <br> Potential for stock-out without replenishment. |

| | |
|---|---|
| **4** | **Warehouse W0485** <br> Critical low levels detected. |

| | |
|---|---|
| **5** | **Warehouse W0725** <br> Urgent need for inventory review. |

| | |
|---|---|
| **6** | **Warehouse W01752** <br> At risk of supply disruption. |

**Action:** Implement robust replenishment planning to prevent supply disruptions and ensure continuous product availability.

# Return Analysis: Pinpointing Process Issues



- Wrong Product
- Quality Issues
- Damaged Items
- Late Delivery

Our return data indicates a near-even distribution across the top four categories: **Wrong Product (1.22K), Quality Issues (1.27K), Damaged Items (1.25K), and Late Delivery (1.26K)**. This even spread suggests that the root causes of returns are not isolated to a single point but rather reflect systemic process issues spanning multiple touchpoints within our supply chain. Addressing these will require a holistic approach.



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# Region-Wise Delivery: Geographic Performance Highlights

Our delivery performance shows strong on-time rates in established markets, but also highlights areas requiring immediate operational focus to mitigate delays.

## Strong Performers

Regions like **Paris, Sydney, and New York** consistently demonstrate high on-time delivery rates, showcasing efficient logistical operations and strong local partnerships.

## Areas for Improvement

**Mumbai and London** are experiencing a higher incidence of delayed deliveries. These regions require immediate operational attention and a review of local logistics to improve efficiency.

## Targeted Interventions

Focused efforts in **India and the UK** are crucial to align their delivery performance with global standards and enhance overall customer satisfaction.



Global Delivery

10.50%

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# Supplier Performance KPIs: Averages and Critical Clusters

A closer look at our key performance indicators for suppliers reveals both overall trends and specific areas of concern that demand immediate strategic intervention.

## 74.44
### Avg Risk Score

A moderately high score indicating the need for continuous vigilance across our supplier base.

## 1.02
### Avg Delay (Days)

While seemingly low, this average can still impact overall supply chain fluidity and customer satisfaction.

## 2.5
### Avg Reliability

Suggests our suppliers are not consistently dependable, highlighting a need for improved quality assurance and partnership management.
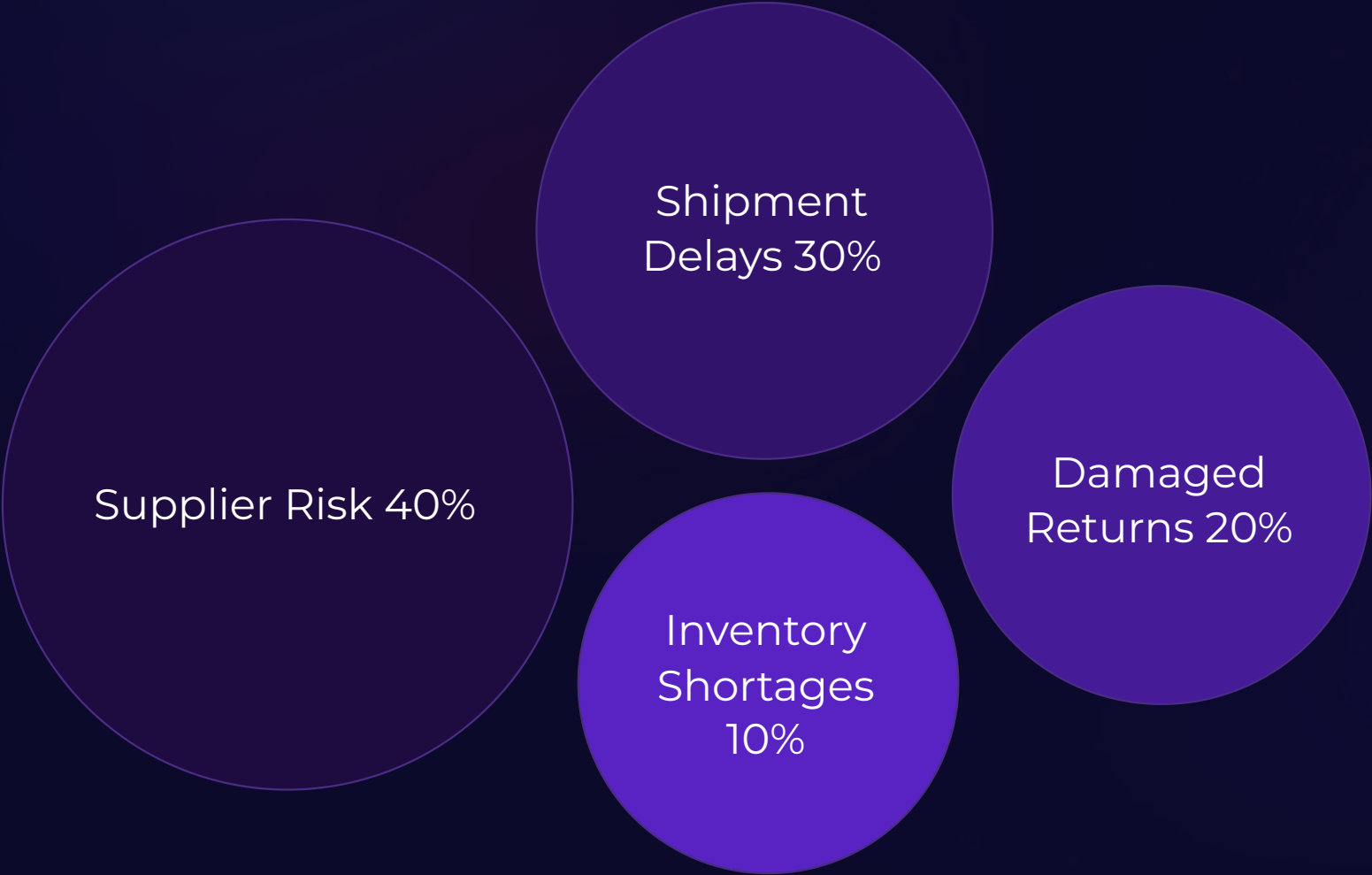
⊗ **Critical Cluster Identified:** Filtering by high-risk scores (>80) and low reliability (<3) uncovers a clear cluster of underperforming suppliers that require immediate action and potential re-evaluation.

# Composite Risk Score: An Advanced Holistic View

Our advanced weighted model provides a holistic composite risk score, integrating key supply chain vulnerabilities to offer a clearer picture of regional risk exposure.

Shipment Delays 30%

Supplier Risk 40%

Damaged Returns 20%

Inventory Shortages 10%

The model reveals China, Germany exhibits the highest composite risk (represented in red on the map), primarily driven by high-risk suppliers and persistent shipment delays in the region. Conversely, Europe and North America appear relatively stable (green/yellow), indicating more robust supply chain operations.

# Strategic Insights & Recommendations: Charting the Path Forward

## Overall Insights:

- **Multi-dimensional Risks:** Supply chain risks are complex, with supplier reliability as the primary contributor.

- **Key Contributors:** Shipment delays and damaged returns together account for nearly 50% of our identified issues.

- **Critical Shortages:** While less frequent, inventory shortages pose significant, critical disruptions when they occur.

## Actionable Recommendations:

- **Supplier Mitigation:** Prioritize high-risk suppliers (Risk > 80, Reliability < 3) with targeted mitigation plans.

- **Quality Enhancement:** Implement stricter quality control checkpoints to reduce "wrong product" and "quality issue" returns.

- **Logistics Optimization:** Improve logistics infrastructure and processes specifically in Asia, UK, and India regions.

- **Proactive Replenishment:** Develop and implement demand-driven inventory planning for low-stock warehouses.

- **Continuous Monitoring:** Utilize the Composite Risk Score as a core KPI for ongoing monitoring in management dashboards.