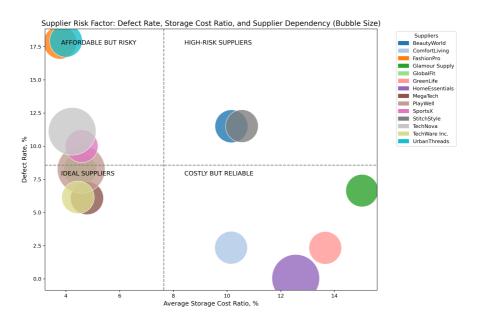
IMPROVING SUPPLIER RISK MANAGEMENT BY AMAZAVR: ANALYSIS AND RECOMMENDATIONS

Amazavr's average profit margin of -0.56% highlights an urgent need for cost efficiency through supplier optimization. While Sports (36.35%) outperforms, categories like Home Goods (-58.4%) and Electronics (2.63%) demonstrate severe inefficiencies. Addressing these issues with supplier renegotiations and performance improvements can reduce costs and increase profitability.

Amazavr's supply chain depends on 14 suppliers across five product categories. The top five suppliers, including BeautyWorld and StitchStyle, contribute over 60% of revenue, highlighting significant dependency risks. Categories such as Home Goods and Sports exhibit high revenue concentration and supplier dependency, emphasizing the need for diversification to mitigate risks.



The **Supplier Risk Factor (SRF) analysis** integrates quality, cost-efficiency, and dependency metrics. A scatterplot above visualizes how the supplier performance can be categorized into four quadrants based on these criteria:

- 1. **Affordable but Risky** (UrbanThreads, FashionPro, TechNova, SportsX):
 - High defect rates, low costs. Dependency is moderate, except for TechNova.
 - **Recommendation:** Focus on improving quality while maintaining cost efficiency. Diversify if defect issues persist, especially for highly dependent suppliers like TechNova.
- 2. **High Risk** (BeautyWorld, StitchStyle):
 - High defect rates and costs. Dependency levels are moderate.
 - **Recommendation:** Immediate intervention is needed to renegotiate costs and improve quality. Monitor dependency closely to prevent over-reliance.
- 3. Ideal Suppliers Top Performers (MegaTech, TechWare, PlayWell, GlobalFit):
 - Low defect rates and costs. Dependency levels are moderate, except for PlayWell.
 - **Recommendation:** Strengthen relationships with these suppliers while managing dependency risk for PlayWell.
- 4. Costly but Reliable (ComfortLiving, HomeEssential, GreenLife, Glamour Supply):
 - High costs, low defect rates. Dependency level is high for HomeEssentials and moderate for others.
 - **Recommendation:** Negotiate better terms to lower storage costs. Maintain quality but reduce reliance on highly dependent suppliers like HomeEssentials.

To enable proactive risk management and optimization strategies, a predictive model is proposed that classifies suppliers into Top Performers, Average Performers, and Underperformers. It leverages historical data on defect rates, supplier dependency, sales, revenue, and storage costs. While including risk factors, the model also contains variables for strategic assessment, making it broader in scope.