

RESILIENCE STRATEGIES IN SUPPLY CHAIN AND PARTNERSHIP: A STRATEGIC ASSESSMENT AT STRIDES PHARMA SCIENCE LTD

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Abstract: In recent years, global supply chain networks have faced unprecedented volatility due to geopolitical tensions, pandemics, and environmental crises. This study examines the critical role of strategic partnerships in bolstering supply chain resilience. The aim is to analyze how collaborative frameworks and risk-sharing strategies impact the responsiveness and adaptability of modern supply chains. Primary data is collected through industry surveys, and a comparative analysis model is used to evaluate the effectiveness of different partnership architectures. The results provide actionable insights for stakeholders to build more robust, agile, and collaborative supply chain ecosystems.

Keywords: Supply Chain Resilience, Strategic Partnership, Risk Management, Collaborative Logistics, Operational Agility.

1. INTRODUCTION

The global marketplace has shifted from a focus on cost-optimization to a focus on risk mitigation and resilience. Organizations are increasingly recognizing that the traditional, isolated approach to supply chain management is insufficient to handle systemic shocks.

Strategic partnerships—defined by shared objectives, transparent data exchange, and joint problem-solving—have emerged as the primary mechanism for navigating modern disruptions. This study focuses on determining the efficacy of these partnerships in enhancing supply chain resilience through the analysis of key performance indicators (KPIs) such as recovery time, resource flexibility, and lead-time stability.

2. OBJECTIVES OF THE STUDY

- To evaluate the impact of strategic partnership on overall supply Chain Resilience.
- To identify the key factors that enhance collaboration between supply chain partners during market disruptions.
- To provide a data driven framework for improving operational performance and long term stability in supply chain networks.

3. PROPOSED METHODOLOGY

The "Resilience Assessment Framework" is designed to quantify the impact of partnership strategies on supply chain performance. The methodology utilizes a mixed-method approach, combining qualitative assessments of relationship strength with quantitative analysis of operational metrics.

Data Collection: Gathering feedback from supply chain managers and logistics partners via structured questionnaires.

Preprocessing: Cleaning and normalizing data to ensure consistency across different industry sectors.

Analysis: Applying a weighted scoring model to assess resilience capabilities.

Performance Evaluation: Comparing the efficacy of "Traditional Transactional Models" against "Strategic Partnership Models."

Data Collection and Preprocessing

The research utilizes data collected from 105 supply chain professionals. The collected data consists of:

Qualitative Data: Feedback on trust levels, communication efficiency, and joint contingency planning.

Quantitative Data: Recovery time from disruptions, percentage of shared inventory, and cost variance during peak volatility.

Raw data: Is pre-processed to remove noise, address missing values, and encode categorical responses, ensuring that the analysis remains focused on valid, actionable insights.

Feature Extraction and Analysis

We identified five core parameters for evaluating resilience in the context of partnerships:

- ✦ **Risk Mitigation Capability:** The ability to identify and respond to threats.
- ✦ **Agility:** The speed at which operations scale up or down.
- ✦ **Transparency:** The level of data and information sharing between partners.
- ✦ **Resource Integration:** The degree to which logistics and assets are shared.
- ✦ **Recovery Speed:** The time required to return to pre-disruption operational levels.

Table 1: Performance Comparison (Strategic Partnership vs. Transactional)

Parameter	Strategies Partnership%	Traditional Model
Risk Mitigation	88%	62%
Agility	85%	68%
Transparency:	92%	55%
Resource Integration	81%	50%
Recovery Speed	84%	60%

Interpretation: Analysis reveal that supply chains operating Tunder strategic partnership models consistently outperform transactional models across all identified resilience parameters.

Performance Evaluation and Result Generation

The study calculate an overall Resilience Score (RS) for both models By applying a weighted average we account for the relative importance of each parameter in the current volatile economic climate

Table 2: Overall Resilience Score

Model Type	Resilience Score%
Strategic Partnership	86.0%
Traditional Model	59.0%

Interpretation: The above table shows the that internal improvement are not enough Building true resilience strong external partnership as well.

4. FINDINGS

- Strategies partnership work done better than traditional models
- Strongly external partnership are key to surviving disruption
- Sharing data leads to faster recovery from problems
- Sharing resources help companies adapt to market changes
- Good communication is essential to prevent supply issues

5. SUGGESTIONS

- Focus on building Long term trust with suppliers.
- Use digital tools to share information clearly
- Create emergency plans together with your partnership
- Do not rely on only one sources for suppliers
- Keep inventory flexible to handle unexpected demand

6. CONCLUSION

This research confirms that the transition toward integrated partnership – driven supply chains is essential for maintaining a competitive advantage .Future research of AI and blockchain technology to automate these collaborative processes, further reducing the latency in data sharing and decision making.

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