

## **A STUDY AND ANALYSIS OF RELIABILITY IN A SUPPLY CHAIN NETWORK**

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### **Abstract**

In today's globalised and highly competitive environment, Supply Chains are becoming larger and more complex with globally dispersed components. Along each supply chain, numerous links exist, embracing material suppliers, Production facilities, distribution services, warehouses, service centers and customers in a cohesive entity. Supply Chain is the integration of material, Capital and information flows. These chain partners co-ordinate and collaborate with their decisions and activities, thus creating sustainable competitiveness. However, as the efficiency of supply chain increases, the risk of disruption or breakdown increases. Effective Supply Chain Management in this environment is a challenging task, which can be made more difficult when Supply Chains face unexpected disruptions. The inability to deliver a supply part due to disruption can have a significant impact on the performance of a Supply chain. Reliability plays an important role in dealing with the risk of disruptions. Reliability analysis is the basis of the Supply Chain. We are incorporating aspects of reliability into the traditional Supply Chain model and analyzing the Supply chain system through reliability analysis.

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