***Supply Chain Management – Resilient Supply Chain***

***What is Resilience?***

(Return, Recover, Respond, React)

***What is a Resilient Supply Chain?***

(Supply Chain Risk Events vs. Supply Chain Disruptions)

***How do you develop a Resilient Supply Chain?***

(Prepare, Respond, Improve)

**Resilient Supply Chain Development**

|  |  |  |
| --- | --- | --- |
| Prepare(Before) | Respond(During) | Improve(After) |
| Prepare(Characteristics of Event Management & Disruption Analysis) | Respond (Characteristics of  Time: Quick Solutions Functionality: Complete  Quality: Enhanced) | Improve(Characteristics of Internal Culture & External Competitiveness) |
| >Event Management: Risk AnalysisKnown-Known RisksKnown-Unknown RisksUnknown-Unknown Risks>Disruption Analysis -Supply Chain Structure --Redundancy of Systems --Flexibility of Policies/Processes  --Readiness of Human Resources -Response Preparation --Recognition of Events, Patterns, Trends --Evaluation of Type, Level, Scope --Mitigation of Probability, Consequences --Development of Plan | -Communication & Information-Critical Solution Points-Identify Minimum Resources-Delegate Authority to Champions-Coordinate Solutions-Transfer Solutions to Strategies |  |

|  |
| --- |
| Further Global Supply Chain Resilience Issues -Security (IT, IP, People) -Sustainability (Environmental & Sociopolitical) -Political Coordination and Trust |

**Risk Management**

|  |  |
| --- | --- |
| Known-Known Risks | Supply Chain Management |
| Known-Unknown Risks | Supply Chain Risk Management |
| Unknown-Unknown Risks | Supply Chain Resilience Management |

|  |
| --- |
| (Knowledge of the Risk-Knowledge of the Outcome) |

**Supply Chain Management**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Risks** | **Events** | **Consequences** | **Response** | **Resilience** |
| Known-Known | SRMERPCRM | QualityContinualImprovement | SCOR Model | Low Requirements |
| Known-Unknown | MarketEconomyCulture | CostService Level | Risk AcceptanceRisk TransferenceRisk Mitigation | Moderate Requirements |
| Unknown-Unknown | CatastrophesUprisingsSubversion | DisruptionDevastation | RedundancySensing & RespondingAdaptability | High Requirements |

***References***

|  |
| --- |
| From SupplyChain 24/7.Article based on authors from Michigan State University.From SupplyChain24/7: <https://www.supplychain247.com/article/understanding_supply_chain_resilience>  |
| Considers Resilience consisting of Resistance and Recovery.Time Series Display of Supply Chain Resilience FactorsTree of Supply Chain ResilienceTree of Supply Chain Resilience. |