

Role of Digital Supply Chain in Enhancing Operational Resilience Post COVID 19

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Abstract: *The COVID-19 crisis revealed fundamental vulnerabilities in supply chains worldwide, halting activities because of lockdowns, demand fluctuations, and logistical congestion. In answer, companies are increasingly adapting to digital supply chain (DSC) technologies as a means to improve operational resilience—the capacity for foresight, responsiveness, and restoration from disruptions. This paper considers the contribution of DSC towards making supply chain resilience post-pandemic stronger through improved visibility, responsiveness, and risk management. Critical technologies like IoT, AI, blockchain, and cloud computing can support real-time monitoring, predictive analytics, and decision-making automation to minimize reliance on human-driven processes. Further, digital twins and advanced analytics enable scenario planning to guarantee timely reaction to future disruptions. Organizations can construct more adaptable, lean, and robust supply chains that can withstand future crises by combining these digital solutions. The report identifies best practices and new trends, offering insights to organizations looking to evolve their supply chains in a post-COVID world..*

Keywords: Digital Supply Chain, Operational Resilience, COVID-19, IoT, AI, Blockchain, Risk Management

