DEVELOPMENT OF A RESILIENCE STRATEGY FOR A SUPPLY CHAIN OF A TOOL MANUFACTURER

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This work focuses its study in the generation of a supply chain resilience strategy for a metal-transformation company located in the city of Puebla, Mexico. The study tends to strengthen the capacity of the company, in terms of resilience in case of any logistic or operational disruption caused by the negative impacts of a disaster. It was suggested to start with a risk management analysis (RMA) following by a business continuity plan implementation. Using the (define, measure, analyze, improve, and control) DMAIC methodology, disturbing agents from a national federal agency were analyzed to detect potential risks on the complete mapping production process of the company, to sort those risks per weighted damage impact later. The strategy set up would help to the tool manufacturer to control risks better and improve the resilience culture of the company. The risk cost impact was estimated to be reduced from 1.2 M USD to USD 500 k USD. In the second scenario, an AHP was used, but considering other aspects like infrastructure, roads, and so forth, the safety sites were found in the northwest, center-west, center-east, southwest, southeastern, and central areas of the state of Puebla.