

ABSTRAK

Pandemi COVID-19 saat ini berdampak besar pada industri otomotif. Dengan meningkatnya gangguan dan kerentanan rantai pasokan, tuntutan ketahanan rantai pasokan bergema di dunia bisnis. Penting untuk mengembangkan kemampuan ketahanan secara tepat waktu karena gangguan kerentanan rantai pasokan dapat menyebabkan kerugian finansial yang serius bagi organisasi dan rantai pasokannya. Tujuan dari penelitian ini adalah untuk mengidentifikasi kerentanan rantai pasokan dan menentukan strategi mitigasi dampak pandemi COVID-19 terhadap ketahanan rantai pasokan di sektor industri otomotif. Metode *Quality Function Deployment* (QFD) yang terintegrasi dengan *Analytical Hierarchy Process* (AHP) telah digunakan untuk mengidentifikasi kerentanan rantai pasokan yang diprioritaskan dan persyaratan kemampuan ketahanan yang sesuai. Hasil penelitian menunjukkan bahwa di antara semua kerentanan, kekurangan dan keterlambatan bahan baku (EV4), peningkatan biaya operasi (FV3), keterbatasan tenaga kerja (OV6), dan persaingan tekanan harga (FV1) memiliki kepentingan yang lebih tinggi daripada yang lain. Demikian pula, pemasok ganda, fleksibel, dan alternatif (DR3), peningkatan produk dan proses untuk efisiensi dan pengurangan limbah (DR8), penundaan dan moda/rute transportasi alternatif (DR12), dan berbagi informasi aktif di seluruh rantai pasokan (DR10) telah kepentingan yang lebih tinggi daripada persyaratan desain kemampuan lainnya.

Kata kunci : *Supply Chain Management, Risk Mitigation, Resilience, Vulnerability, AHP, QFD.*



ABSTRACT

The current COVID-19 pandemic has had a major impact on the automotive industry. With the increasing disruption and vulnerability of supply chains, the demand for supply chain resilience resonates in the business world. It is important to develop resilience capability in a timely manner as disruption of supply chain vulnerabilities can cause serious financial losses for the organization and its supply chain. The purpose of the research is to identify supply chain vulnerabilities and determine strategies for mitigating the impact of the COVID-19 pandemic on supply chain resilience in the automotive industry sector. The Quality Function Deployment (QFD) method which is integrated with the Analytical Hierarchy Process (AHP) has been used to identify prioritized supply chain vulnerabilities and the appropriate resilience capability requirements. The results of the study resulted that among all vulnerabilities, raw material shortage and delays (EV4), increase operation cost (FV3), limited labor (OV6), and Price pressure competition (FV1) have higher importance than others. Similarly, multiple, flexible, and alternative suppliers (DR3), product and process improvement for efficiency and waste reduction (DR8), postponement and alternative modes/routes of transportation (DR12), and active information sharing throughout the supply chain (DR10) has a higher importance than any other capability design requirements.

Keywords : Supply Chain Management, Risk Mitigation, Resilience, Vulnerability, AHP, QFD.

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