

Fuzzy House of Risk (FHOR) to Manage Supply Chain Risk

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Abstract

If there is an unexpected event in the supply chain, it will disturb material flow. The occurrence of such interference would have caused loss of both time and cost. In order to anticipate this situation, it needs proper supply chain risk management. Method are used in this research is Fuzzy House of Risk (FHOR). FHOR is combination of fuzzy reasoning risk assessment model and house of risk. House of Risk Method is used to identify the most potential risk agents, while the fuzzy reasoning risk assessment model is used to determine the risk severity by risk agents. The proposed method was implemented in a real case study in wooden toy industries which has wide marketing range. Based on the result and analysis, it is found that risk agent stock out of the product is the most potential risk agent. To reduce the impact, recommended mitigation strategies that can be used for stock out product risk agents in warehouse are flexible supply base, safety stock, internal coordination, as well as create and control production schedules.

Keywords: Fuzzy, House of Risk, Supply Chain, Risk.

Acknowledgements

Add acknowledgement if need

Biographies

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