A decision framework to mitigate supply chain risks: an application in the offshore-wind industry
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Abstract	Decision support systems (DSSs) for supply chain risk management benefit from a holistic approach for mitigating risks, which include identification and assessment of risks and evaluation and selection of measures to appease risks. However, previous studies in this area overlooked probability estimation, measure selection, and assessment of interdependence of risks and measures. We aim to fill these gaps in the literature by proposing a two-stage DSSs that will assist managers in not only select mitigation strategies for supply chain risks, but also mitigation tactics when risks occur. Our DSS employs a novel matrix formulation for decision-tree analysis, which integrates expert judgments. We applied our models to the supply chain of a fast-expanding offshore-wind industry, which faces high levels of exposure to risks because of the associated complexities in this domain. The results demonstrate how to select mitigation strategies and mitigation tactics for managing supply chain risks within the offshore-wind industry.