



RISK MANAGEMENT FOR DANGEROUS GOODS LOGISTICS COMPANY (PT XYZ TRANSPORT)

KEVIN PINONDANG PARULIAN MANURUNG



**BUSINESS STUDY PROGRAM
SCHOOL OF BUSINESS
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ABSTRACT

KEVIN PINONDANG PARULIAN MANURUNG. *Risk Management for Dangerous Goods Logistics Company (PT XYZ Transport)*. Supervised by SITI JAHROH and ANITA PRIMASWARI WIDHIANI.

The logistics industry plays an important role in supporting industrial activities, including sectors that handle dangerous goods, which require high safety standards. PT XYZ Transport, as a provider of dangerous goods logistics services, continued to face various operational risks that may result in financial losses and reputational damage. This study was conducted from August 2024 to November 2025 and aims to analyze business processes, identify and assess operational risks, and provide recommendations for the implementation of risk management based on the ISO 31000:2018 framework. The research adopts a descriptive qualitative approach, supported by Business Process Model and Notation (BPMN) for business process mapping and a RACI Matrix to define roles and responsibilities. Data were collected through interviews with the sample of 7 people, observations of the company's activities, and accident reports from the 2020–2024 period. The results indicate that most risks occur during the execution phase, particularly in loading and transportation activities, with human error identified as the dominant contributing factor. Risk levels range from low to very high, highlighting the need to strengthen risk management practices to enhance the company's operational reliability.

Keyword: BPMN, ISO 31000:2018, operational risk, RACI matrix

ABSTRAK

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Industri logistik memegang peranan penting dalam mendukung aktivitas industri, termasuk sektor yang menangani bahan berbahaya yang membutuhkan standar keselamatan tinggi. PT XYZ Transport sebagai perusahaan penyedia jasa logistik bahan berbahaya masih menghadapi berbagai risiko operasional yang dapat menimbulkan kerugian finansial dan reputasi. Penelitian ini dilakukan pada Agustus 2024 sampai November 2025 dengan bertujuan untuk menganalisis proses bisnis, mengidentifikasi dan menilai risiko operasional, serta memberi rekomendasi penerapan manajemen risiko berdasarkan kerangka ISO 31000:2018. Metode penelitian menggunakan pendekatan deskriptif kualitatif dengan dukungan BPMN untuk pemetaan proses bisnis dan RACI Matrix untuk menentukan peran. Data diperoleh melalui wawancara dengan sampel 7 orang, observasi aktivitas perusahaan, dan laporan kecelakaan periode 2020–2024. Hasil penelitian menunjukkan bahwa sebagian besar risiko muncul pada fase eksekusi, terutama pada aktivitas pemuatan dan transportasi, dengan human error sebagai faktor dominan. Risiko bervariasi dari rendah hingga sangat tinggi, dan temuan ini menegaskan perlunya penguatan manajemen risiko untuk meningkatkan keandalan operasional perusahaan.

Kata Kunci: BPMN, ISO 31000:2018, matriks RACI, risiko operasional



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KEVIN PINONDANG PARULIAN MANURUNG

Thesis
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FOREWORD

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Bogor, January 2026

Kevin Pinondang Parulian Manurung



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