WWW.IJRPR.COM

International Journal of Research Publication and Reviews

Journal homepage: www.ijrpr.com ISSN 2582-7421

A Study on Topic Business Risk Calculation

[1]Abhishek Parmar, [2]Amit Yadav, [3]Vaishali Shah

[1] Post Graguation Student, [2] Post Graduation Student, [3] Assistant Professor
Faculty of Management Study, Parul University, Vadodara, India

ABSTRACT

This research explores how the process of business risk calculation is identifying potential threat to your business and then analyzing those probabilities to make better decisions. It helps define where and when the likelihood of risk events will impact your company's financial well-being. Because business risk is unavoidable, risk management is an important part of running a business. It is important to calculate risk before taking them because it allows you to make an informed decision based on the potential outcome of the risk, as well as the likelihood of sucess

INTRODUCTION

A production department is a group of Functions within a business that is Responsible for the manufacturer goods.The production department is responsible For the manufacturing process of a company's Product or service. Its primary function is To ensure that products or services are Produced efficiently, on time, and to the Required quality standards.

Nishant organic Pvt. ltd. Is one of the largest manufacturers Of the plasticizers especially DEP (Diethyl Phthalate), a widely used plasticizer. The Nishant organic Pvt.Ltd. has two highly Equipped manufacturing plants with Total capacity of 1000 MT/Month.

Activities of production department

In production department there are major five Activities related to production are: Mobilisation of recourses Planning of production process Actual production The selection of a particular methods of Production Management of production process Production management deals with converting Raw material into finished goods or product. Production also deals with decision-making Regarding the quality, quantity, cost ,etc.,of Production. It applies management principals To production. Production is a part of Business activities.

The production department is a critical component of the chemical industry, responsible for manufacturing and processing chemical products.

Effective production management requires a strong focus on safety and quality control, as well as a deep understanding of the chemical processes involved in manufacturing chemical products.

Advances in technology, such as automation and data analytics, are transforming the production department of the chemical industry. Automation can improve efficiency and reduce the risk of accidents, while data analytics can be used to optimize

Overall, the conclusions suggest that the production department of the chemical industry is a critical component of the industry that requires a strong focus on safety, quality control, and risk management. Advances in technology and a growing concern for environmental sustainability are transforming the production department and driving changes in production processes. Companies that prioritize safety, quality, and sustainability in their production processes are likely to be better positioned for long- term success in the chemical industry

LITERATURE REVIEW

Martin Leo Sunil Sharma (2019)

Since the global financial crisis, risk management in banks has gained more prominence, and there has been a constant focus on how risks are being detected, measured, reported and managed. Considerable research; **Deloitte University Press 2017**; **Helbekkmo et al. 2013**; **MetricStream 2018**; **Oliver Wyman 2017**), both in academia and industry, has focused on the developments in banking and risk management and the current and emerging challenges. In tandem, there has been a growing influence of machine learning in business applications, with many solutions already implemented and many more being explored.

McKinsey & Co highlighted that risk functions in banks, by 2025, would need to be fundamentally different from what they are today. The broadening and deepening of regulations, evolving customer expectations and the evolution of risk types are expected to drive the change within risk management. New products, services and risk management techniques are being enabled through the application of evolving technologies and advanced analytics. Machine learning, identified as one of the technologies with important implications for risk management, can enable the building of more accurate risk models by identifying complex, nonlinear patterns within large datasets. The predictive power of these models can grow with every bit of information added, thus enhancing predictive power over time. It is expected that machine learning will be applied across multiple areas within a bank's risk organisation. Machine learning has also been recommended as an initiative that could help in the transformation of the risk management function at banks.

Jennifer Blackhurst (2006)

Inbound supply risk is defined as the potential occurrence of an incident associated with inbound supply from individual supplier failures or the supply market, resulting in the inability of the purchasing firm to meet customer demand [1] and as involving the potential occurrence of events associated with inbound supply that can have significant detrimental effects on the purchasing firm [2]. These risks or supply chain failures can be costly and lead to significant delays in customer deliveries. Therefore, managing supply risk is a critical component of managing the supply chain. Consequently, it is important to an organization's success to understand the sources of supply risk and how to best manage them A typical supply chain system can be large in scale, having many tiers of suppliers, where each supplier tier of the supply chain provides goods or services to the next level supplier tier in the supply chain. Moreover, each tier may have multiple components or members, creating a mesh network within the supply chain where the linear flow of goods is rare.

CAROL ALEXANDER (2003)

Although financial risk management has existed as a discipline in its own right for less than 20 years, it is already an enormous subject. A modern day risk manager requires much more than a detailed knowledge of financial markets. Risk assessment in particular has become a statistical science- and art- and model validation requires an understanding of the complex mathematical models that are now used to price financial derivatives. Risk management is a main concern for the front and middle office functions of banks, and is becoming increasingly important for fund managers in the volatile financial markets of today.

Given the comprehensive nature of the subject, I have been very selective in the topics covered here. The first part of this paper discusses the global trends in financial markets that have an impact on financial risk management at the level of the firm. I argue that the main challenges that financial institutions now face, as a result of these trends, arethe proper aggregation of economic capital over all lines of businesses and over the major categories of risksthe development of risk management processes to cover new types of risk.

OBJECTIVE

- To Operational Risks: These are risks associated with day-to-day operations of the business.
- To Financial Risks: Financial risks can include risks related to capital investments, such as project delays or cost overruns, as well as risks related to cash flow, such as changes in interest rates or exchange rates.
- To Regulatory Risks: The chemical industry is subject to a wide range of regulations, including environmental regulations, occupational health and safety regulations, and product safety regulations.
- To Market Risks: Market risks can include changes in demand for chemical products, fluctuations in prices of raw materials, and competition from new entrants.

RESEARCH METHODOLOGY

Research Design: The research design should be selected based on the research problem. Since this study aims to examine the implementation of Lean Manufacturing in Food and Beverage Industry, A Descriptive Research Design should be selected to collect and analyze data .

Sampling Technique: The sampling technique should be chosen based on the sample size and representativeness of the population. A random sampling technique can be used to select a representative sample from the target population.

Data Collection Method: The data collection method should be selected based on the research questions. In this case, a survey can be conducted to collect data on their satisfaction level with the services of Food and Beverage Industry.

Data Analysis Technique: The data analysis technique should be chosen according to the research design and research questions. Descriptive statistics such as mean, standard deviation, and frequency distribution can be used to analyze the data obtained from the survey.

Ethical Considerations: Ethical considerations are important in any research project, and this study is no exception. Participants should be informed about the purpose of the study, their rights to confidentiality and anonymity, and their option to withdraw from the study at any time.

Data Management: Proper data management techniques should be used to ensure the accuracy and integrity of the data collected. Data should be stored in a secure location, and only authorized persons should have access to it.

RESEARCH DESIGN

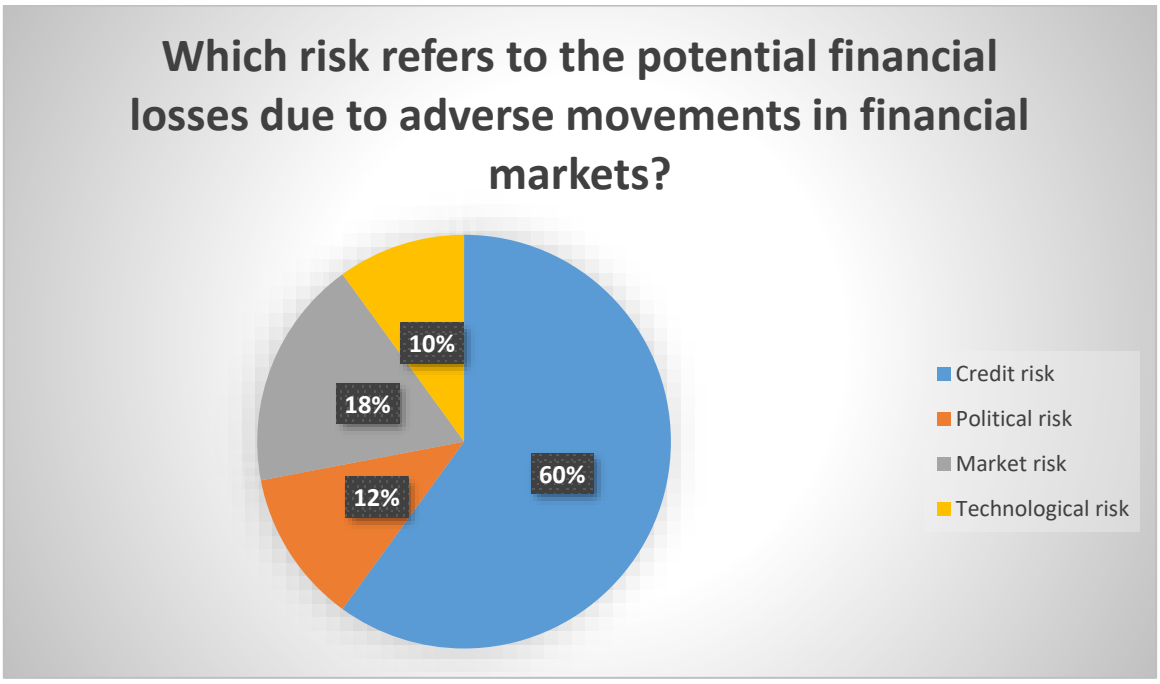
The research design is Qualitative & Quantitative Research Design.

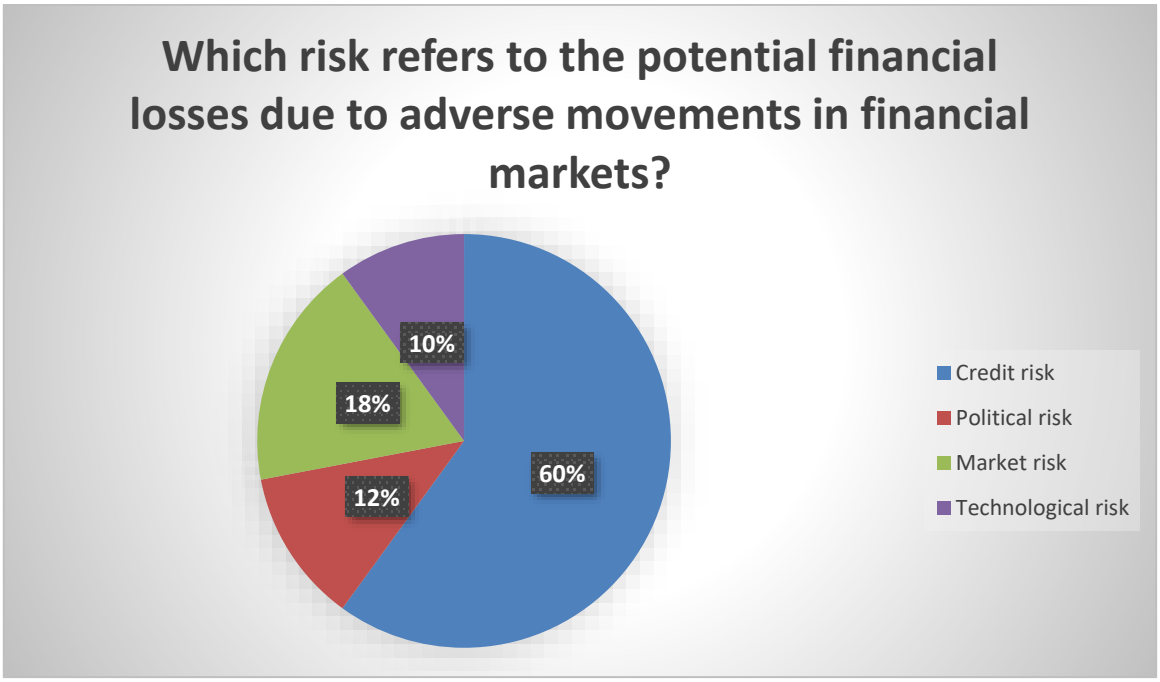
Tools and techniques used for data analysis are - Graphs, tables, inferential statistics etc.

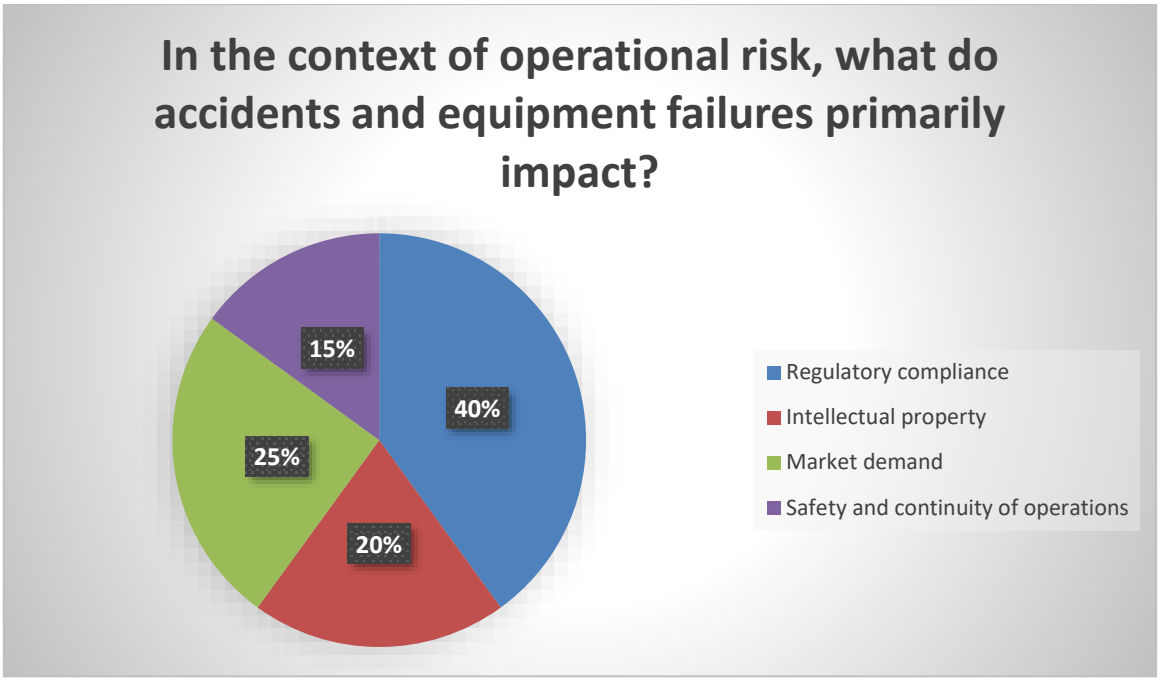
A Descriptive Research Design should be selected to collect and analyze data.

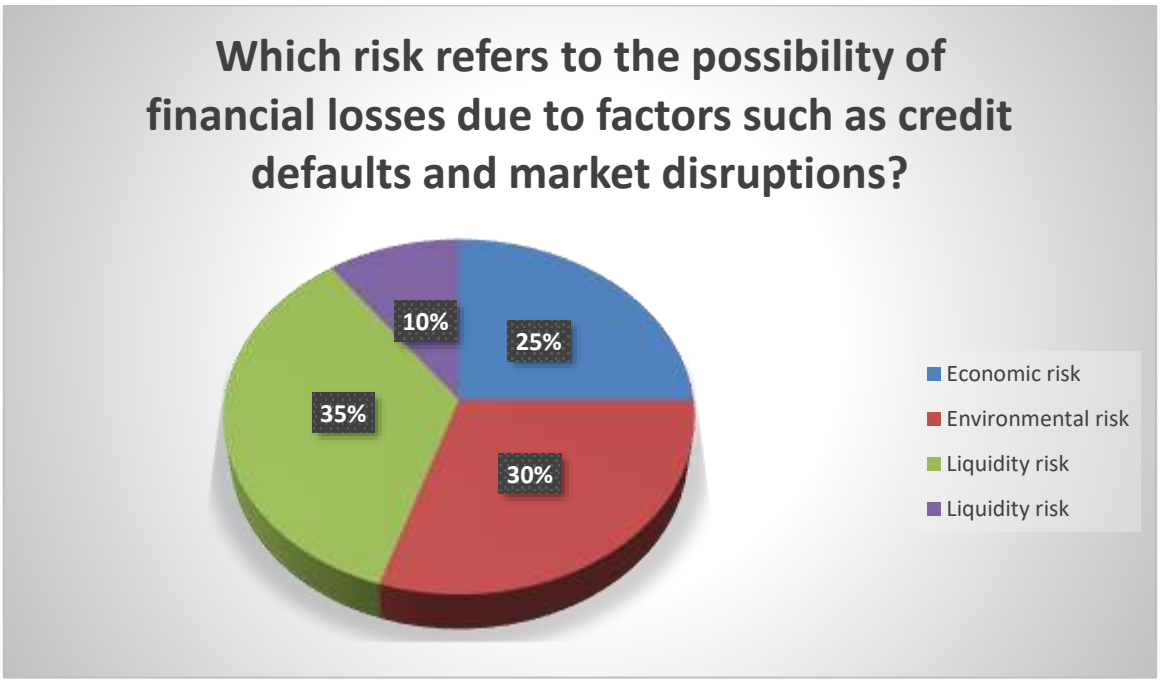
DATA COLLECTION

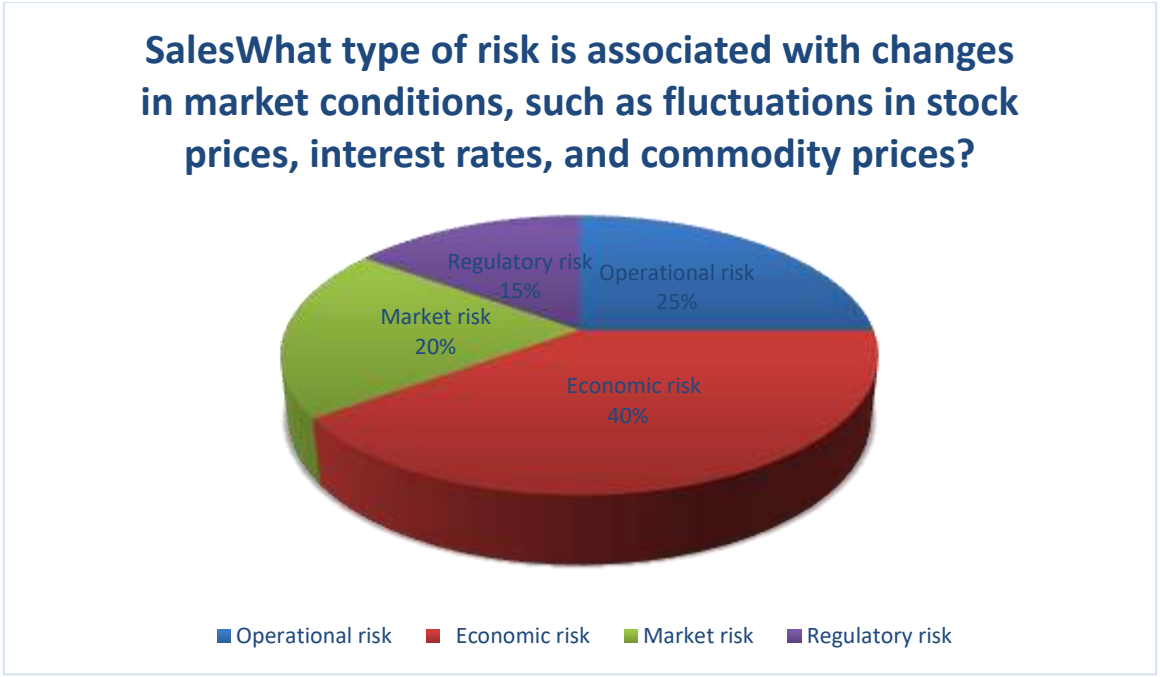
The Data collection tool which is been used for this research study is google form.

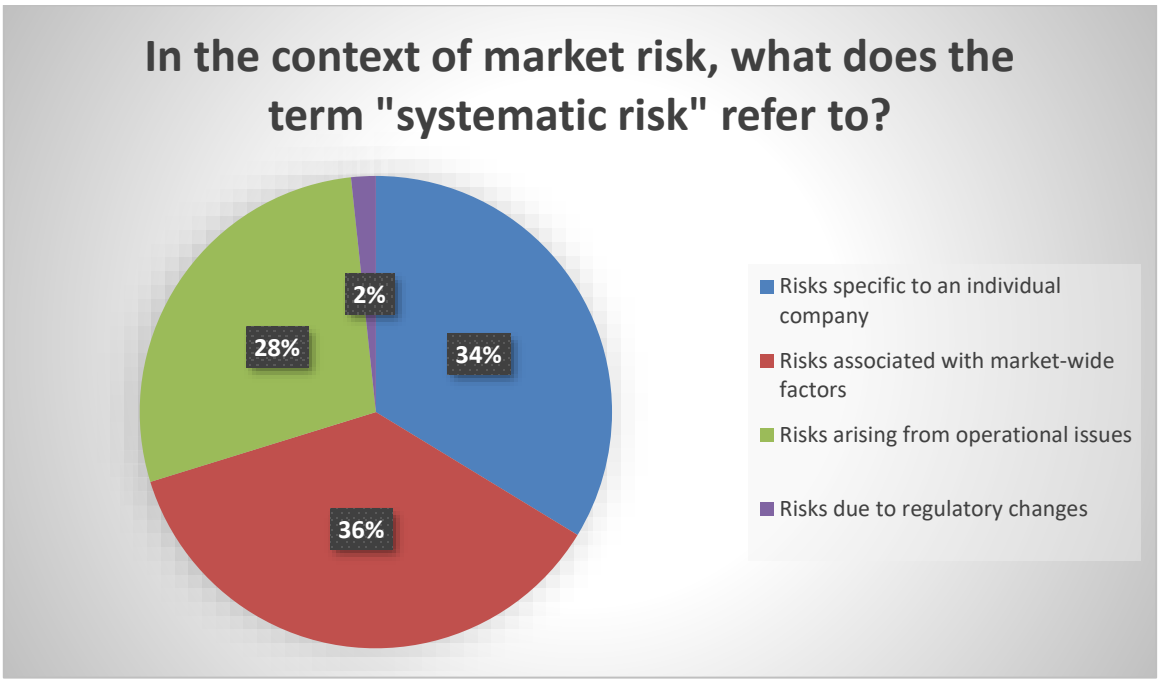





In the context of operational risk, what do accidents and equipment failures primarily impact?
15%
40%
25%
20%
Regulatory compliance
Intellectual property
Market demand
Safety and continuity of operations


Which risk refers to the possibility of financial losses due to factors such as credit defaults and market disruptions?
10%
25%
35%
30%
Economic risk
Environmental risk
Liquidity risk
Liquidity risk


SalesWhat type of risk is associated with changes in market conditions, such as fluctuations in stock prices, interest rates, and commodity prices?
Regulatory risk 15%
Operational risk 25%
Market risk 20%
Economic risk 40%
Operational risk
Economic risk
Market risk
Regulatory risk


In the context of market risk, what does the term "systematic risk" refer to?
2%
28%
34%
36%
Risks specific to an individual company
Risks associated with market-wide factors
Risks arising from operational issues
Risks due to regulatory changes

HYPOTHESIS

Here are three possible hypotheses on the topic of business risk calculation:

Companies that use simulation models to calculate business risks are better able to manage their risks than companies that do not use simulation models

Companies that prioritize financial risk calculation over other types of risk calculation are more likely to experience financial distress

This hypothesis suggests that companies that focus too heavily on financial risk calculation, such as calculating financial ratios, may overlook other types of risks that could impact their business, such as operational risks or regulatory risks. Overlooking these risks could lead to financial distress, as the company may not be adequately prepared for unexpected events

CONCLUSIONS

Conclusions on the topic of business risk calculation in the chemical industry:

The chemical industry is subject to a wide range of risks, including operational risks, financial risks, regulatory risks, and market risks. Effective risk management requires a comprehensive approach that considers all of these potential risks.

Risk mapping is a useful tool for business risk calculation in the chemical industry, as it allows companies to identify and map out potential risks across different areas of their business. This can include risks related to supply chain disruptions, accidents, equipment failures, and regulatory compliance.

Simulation models are becoming increasingly popular for business risk calculation in the chemical industry. These models allow companies to test different scenarios and estimate the probability of different outcomes, which can help them make more informed decisions about risk management.

Companies that focus too heavily on financial risk calculation may overlook other types of risks that could impact their business, such as operational risks or regulatory risks. This could lead to financial distress, as the company may not be adequately prepared for unexpected events.

Effective risk management in the chemical industry requires ongoing monitoring and adjustment of risk management strategies. Companies should regularly review and update their risk management strategies based on business risk calculations, and stay up- to-date with changes in the regulatory environment and market trends.

Overall, the conclusions suggest that effective business risk calculation in the chemical industry requires a comprehensive approach that considers a wide range of potential risks and uses a range of tools and techniques to identify and mitigate those risks. By staying up-to-date with potential risks and regularly reviewing and updating risk management strategies, companies in the chemical industry can improve their resilience and reduce their exposure to potential risks.

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