

Strategic Insights: Analyzing External Environment Affecting Private Oil Spill Response Company In Indonesia

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ABSTRACT

It is inevitable that the growth of the oil and gas industry becomes one of the most significant causes of environmental pollution. The increasing number of oil and gas exploration and production company and companies focusing in conservation of natural and environmental resources will inevitably become a dilemma that will be faced considering the potential impact of such activities. It is important for a private oil spill response company in Indonesia to understand market dynamics, comply with regulations, manage risks, and build a strategic position for a long-term success. This research is part of the type or type of qualitative research that is analytically descriptive in order to provide a complete picture of the occurrence or event being studied and to analyze how the variables being investigated relate to each other. Analyzing the external environment that affecting private oil spill response company in Indonesia improves the organization's capacity to mitigate risks, adjust to technological advancements, and preserve a competitive advantage. It also enables the company to maintain a higher level of customer and stakeholder engagement that essential to deliver effective and efficient services.

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Introduction

Over the years, oil and natural gas have continued to be the primary sources of energy that people use for a variety of needs in the fields of industry, transportation, and households. Furthermore, the use of various products is continuously increasing (Arief & Maupa, 2021). This has led to an increase and expansion of exploration, exploitation and production activities including oil processing activities in many countries, including Indonesia. With crude oil and condensate production in 2022 reaching 223,532,500 barrels, the risk of oil spills is high. It is inevitable that the growth of the oil and gas industry becomes one of the most significant causes of environmental pollution (Fitriani et al., 2021). Increased oil and gas production and conservation of natural and environmental resources will continue to be a dilemma that may be faced given the potential impact of such production activities. The oil and gas industry can cause

environmental pollution throughout its production process, ranging from the upstream to the downstream (Hassan et al., 2022). The process ranges from the exploration phase (including geological exploration, seismic activity, and drilling to find sources of petroleum and gas) to the exploitation stage (taking and producing oil and natural gas), and then to the downstream phase (Christodoulou & Langley, 2020).

One of the sources of marine pollution that has always attracted public attention is the contamination from oil spills, which is perceived by communities around the coast quickly and destroys living creatures around the shore (Yunus & Sijabat, 2021). Oil spills that can occur both in water and on land can have a negative impact on the environment and public health. Furthermore, the spill could have a financial impact on the parties that caused the spill and those affected by the spill (Kulkarni & Sivaraman, 2020). Crude oil pollution in the waters is often an environmental problem and can jeopardize the investment climate. In particular, these spills have significant adverse effects on the coastal environment and marine waters, which are generally through direct contact with aquatic organisms. The direct impact is known to have a strong impact on fishing and marine tourism activities, as well as indirect impacts such as through environmental disturbances caused by pollution from oil spills (Aini et al., 2021).

Indonesia needs adequate preparedness to deal with oil spills, as well as a service provider that can support and facilitate the development of oil spill controls (Shyam, 2019). In order to support the implementation of these measures and to adopt what has been implemented in other countries, the government and its supporting bodies need to cooperate with various stakeholders in order to establish an integrated relationship between the government, the oil and gas industry and the oil spill management organizations (Amjad et al., 2024). Private oil spill response company has been established to address the challenges and business opportunities that exist in the field of oil spill management in response to the increasing need for oil spill handling in the region of Indonesia that is rich in natural resources and has high maritime activity (Mutua et al., 2024).

If compared to the number of Co-operation Contractors engaged in exploration and exploitation activities in the territory of Indonesia as well as ports, tankers and other units of activity that are at risk of oil spills, the business of pollution management services in particular oil spill can be categorized as Blue Ocean Market. The Blue Ocean Market, which is a business concept introduced by W. Chan Kim and Renée Mauborgne in the book entitled "Blue Ocean Strategy", is a different business concept from the "Red Ocean Market", which means that companies compete in an existing and full-blown market, whereas in the Blue Ocean market, entrepreneurs create new market spaces where there is no significant competition. In this type of market, demand exists because it is created and not disputed. The Blue Ocean Market offers opportunities for high growth and huge profits because the company is in an environment free from strict competition. In the process of creating a Blue Ocean Market, a strategic approach called the Blue Ocean Strategy was used by the entrepreneurs. This strategy emphasizes the importance of creating new value for customers through innovation, rather than competing in existing markets (Bergaplass & Eriksen, 2012).

The concept of the Blue Ocean Strategy can be identified from the untouched market area, the presence of demand from users of goods/services and the opportunities for business growth that provide significant gains. Unlike the Red Ocean Strategy, (Chan Kim & Mauborgne, 2005) belief that "industrial boundaries have been defined and

accepted and the rules of competition known". Important factors in the BOS concept include value innovation, a four-step framework and a strategy canvas.

Kim Changsu, Yang Kyung Hoon and Kim Jaekhyung in their research entitled "A Strategy for Third-party Logistics Systems: A Case Analysis Using the Blue Ocean Strategy" argued that the blue ocean strategy is a strategic approach aimed at creating new markets and industries where demand is created rather than fought. It gives companies guidance on how to escape the intense competition in the same market space. Logistics services have become the core support services for e-business. Businesses must be committed to finding new growth engines as the worldwide expansion of e-Business has resulted in unlimited global competition. In situations like this, the Blue Ocean Strategy offers guidelines on how can survive by creating new and undisputed market space rather than competing in existing markets.

In his book entitled "Business Research Method", (Cooper & Emory, 1995) argued that "if a company is able to outperform its competitors by improving quality, reducing cycle lengths, increasing yields, maximizing output and reducing costs for various internal business processes, the survival of a company will be guaranteed, but such an improvement will not give a company a sustainable competitive advantage". Therefore, for the sake of company progress and sustainability, a business strategy method is needed that directs a company to create a blue ocean so that it becomes a company with competitive advantages and sustainable business. Based on this, the researchers attempted to analyze the application of Blue Ocean Strategy on the oil spill response services business in Indonesia in order to become a market-dominant and sustainable company.

It is important for a private oil spill response company in Indonesia to conduct an analysis of the external environment, as it is instrumental in identifying both opportunities and hazards that could potentially affect the business. The company can identify growth opportunities by conducting a comprehensive analysis of the external landscape, which includes emerging technologies, regulatory changes, and market trends. At the same time, this analysis underscores potential threats, including economic downturns, increased competition, and changes in environmental regulations, which could present obstacles. In the oil spill incident response industry, which is subject to stringent environmental regulations, it is especially important to remain informed about regulatory changes. The company can prevent legal complications and sanctions by closely monitoring these external factors and ensuring compliance. Additionally, the company can better meet market demands and differentiate itself from competitors by customizing its strategies and offerings to account for market dynamics, such as consumer requirements and industry trends (Hiatt et al., 2015).

The company's risk management capabilities are also improved by analyzing the external environment. The company can guarantee business continuity in adverse situations by creating robust contingency plans that address risks such as geopolitical instability, natural disasters, and economic fluctuations. This external insight is essential for strategic planning, as it informs decision-making and assists the company in aligning its strategies with external factors, thereby effectively positioning itself within the industry. Additionally, the company can maintain a competitive advantage in the market by adopting innovative solutions and comprehending external factors such as technological advancements and industry best practices. Lastly, the company can enhance its service delivery and cultivate strong relationships with consumers and stakeholders by being attentive to social, cultural, and economic factors.

The novelty of this research lies in its unique focus on the external environmental factors that specifically impact private oil spill response companies in Indonesia. While existing literature primarily emphasizes oil spill response techniques and management strategies, this study delves into a comprehensive analysis of the external environment—such as economic, socio-cultural, and technological factors—that influence business sustainability and strategic positioning in the oil spill response sector. Additionally, the application of the Blue Ocean Strategy within this niche market introduces a fresh perspective on how companies in this industry can innovate and thrive in an uncontested market space.

The primary objective of this research is to analyze the external factors affecting the operations and growth of private oil spill response companies in Indonesia. By understanding these external variables, the study aims to provide strategic insights that will help companies navigate market dynamics, comply with regulations, manage risks, and adopt technological advancements. The research seeks to empower these companies to develop long-term competitive advantages and sustainability in an increasingly complex and evolving market.

The benefits of this study are multifaceted. For private oil spill response companies, the findings will offer actionable strategies to enhance business resilience and market adaptability. By identifying potential risks and opportunities in the external environment, companies can make informed decisions, ensure regulatory compliance, and improve service delivery. Moreover, the research will contribute to the broader field of environmental management by providing valuable insights for policymakers and stakeholders involved in oil spill response initiatives. These insights will foster stronger collaboration between private companies and the government, leading to improved environmental protection and sustainable business practices in Indonesia.

Research Methods

The paradigm used in this research is the paradigm of post-positivism. In its development, this paradigm emerged as a criticism of the positivist paradigm which considers a reality that occurs to be absolute or uninterrupted to the external factors surrounding it. Unlike the post-positivistic paradigm, which assumes that a reality can occur or be constructed on the basis of influences from its various external sides. Therefore, research using the post-positivist paradigm is qualitative and requires verification processes at the data collection and analysis stage at the time of conducting research (Creswell & Creswell, 2017).

This research is part of the type or type of qualitative research that is analytically descriptive, because in general it aims to observe a phenomenon and further investigate the substance present in the phenomena, as well as to try to combine describing and analytical elements in order to provide a complete picture of the occurrence or event being studied and to analyze how the variables being investigated relate to each other.

The data used in this research is derived from primary data and secondary data. Primary data or also referred to as data from the first source is obtained directly and in fact. The technique used to obtain first data is through in-depth interviews with informants who have been designated as reference sources of information and an overview of the purpose of the research which can eventually answer the research questions, whereas secondary Data is obtaining through the study of literature as a reference book, previous research using the same theory and researching topics similar to research researchers'

research and news articles in online media related to the business and services of oil spill management existing in Indonesia.

Results and Discussions

An analysis of the external environment of the company will provide an overview of the strengths, weaknesses, opportunities and threats that companies may face now and in the future.

Economic Factor

Performing an analysis on economic factor enables the firm to create strong strategies and sustain a competitive advantage in the oil spill response services sector in Indonesia. It is also known can influence the company's performance. In terms of strengths, oil spill response service business supported by government and policies aimed at protecting marine environments can increase demand for oil spill response services. Indonesia's extensive coastline and busy shipping lanes make it a strategic location for oil spill response services. Other than that, the accumulation of specialized knowledge and technology in oil spill response, making the company more competitive and economies of scale in operations can reduce costs and increase profitability.

The business climate in Indonesia also provides a wide range of opportunities for oil spill response company in Indonesia due to the increasing emphasis on environmental sustainability by both the public and corporations that result in a rise in the demand for oil spill incident response services. The implementation of new technologies can enhance efficiency and effectiveness, thereby reducing long-term operational costs of the company. Opportunities to diversify into other environmental services or to expand services to neighboring countries. Lastly, partnerships with the private sector and government for the implementation of large-scale undertakings and disaster response initiatives.

The long-term viability of the Indonesian oil spill response services industry is at risk due to significant weaknesses and threats. The expense of maintaining and deploying specialized equipment and personnel is a significant challenge, as it results in high operational costs. Furthermore, the industry's financial stability may be directly impacted by global oil price fluctuations, as it is heavily dependent on the energy sector. Limited financial resources may pose a challenge for smaller companies, particularly in terms of investing in the sophisticated technology and equipment required for effective response efforts. Additionally, the financial resources are further burdened by the substantial costs associated with regulatory compliance.

Broader economic factors also pose a threat to the industry. The demand for oil spill response may decrease as a result of reduced expenditures for environmental services, which can be a consequence of economic instability. This risk is further exacerbated by the volatility of energy prices, which can affect the oil industry's investment in these services. Additional challenges may arise as a result of the growing competition from both domestic and international companies, which could potentially impact market share and drive down pricing. Additionally, the operational risks associated with Indonesia's susceptibility to natural disasters, including earthquakes and tsunamis, are substantial, complicating response efforts and elevating the overall risks that companies in this sector encounter.

Socio-Cultural Factor

Performing a socio-cultural factor analysis enables the firm to investigate the operational impacts of social and cultural factors in the oil spill response services sector

in Indonesia. The oil spill response services company in Indonesia derives substantial advantages from robust socio-cultural factors that improve its operations and community reputation. The company's reputation and positive relationships are enhanced by active engagement with local communities, while the increasing public awareness and concern about environmental issues have resulted in increased community support for oil spill response initiatives. The company is able to operate effectively across Indonesia's diverse regions by demonstrating a profound understanding and respect for local cultural practices. This approach ensures greater cooperation with local communities and smoother operations. Additionally, the company's public image is improved by the implementation of comprehensive Corporate Social Responsibility (CSR) initiatives that prioritize environmental protection. These initiatives also fortify community connections by fostering employment creation and participation in local initiatives.

This socio-cultural environment is replete with opportunities, particularly in light of the growing emphasis on environmental education. The company can increase public awareness and backing for its initiatives by fostering partnerships with institutions and communities. By strengthening partnerships with local communities, cooperation is further bolstered, thereby facilitating the establishment of employment and the cultivation of benevolence. This ensures that oil accidents are addressed more promptly and efficiently. Additionally, by safeguarding Indonesia's cultural and natural heritage sites from oil pollution, the organization can establish itself as a critical participant in the preservation of the country's thriving cultural tourism sector. This further aligns the company's efforts with the socio-cultural values of the territories in which it operates, forming potential partnerships with the tourism sector to promote environmental sustainability.

The efficacy and reputation of the Indonesian oil spill response services company may be adversely affected by the company's significant socio-cultural weaknesses and threats. The oil industry's negative public perception frequently extends to response companies, which complicates the process of establishing trust and support among local communities. Resistance from these communities can further complicate efforts to obtain cooperation, as misunderstandings or a lack of awareness about the company's role and importance can serve as additional obstacles. The implementation of standardized response strategies across various regions can be challenging due to the diverse cultural landscape of Indonesia. Language barriers and divergent cultural norms may confound communication and coordination, while certain communities may resist oil spill response activities due to environmental concerns or distrust of external organizations, resulting in delays or increased costs in the deployment of essential measures.

These vulnerabilities are further exacerbated by external threats, such as public outcry and activism, which can result in the company being compelled to adhere to more stringent standards by environmental groups and activists, potentially rising operational costs. The company's reputation may be tarnished and more stringent regulations may result from public protests and negative media coverage. The rapid dissemination of misinformation and falsehoods, particularly through social media, has the potential to further erode public trust and generate opposition. Furthermore, cultural sensitivity concerns present a substantial risk; mistakes in managing local customs or religious practices can result in community resentment and disrupted relationships with critical stakeholders. Additionally, operations may be disrupted and personnel may be at risk due to social unrest or socio-political instability in specific regions. These factors underscore

the necessity of proactive communication strategies and culturally informed engagement in the company's operations.

Technological Factor

The oil spill response services company in Indonesia is a leader in the industry due to its significant capabilities in advanced technology and continuous innovation. The company's operations are optimized and effective through the implementation of state-of-the-art technologies, including drones, satellite imaging, and remote sensing, which facilitate the early detection and rapid response to oil accidents. The organization's dedication to ongoing technological advancement, which is supported by substantial investments in research and development, guarantees that it remains ahead of its competitors. This innovation is primarily concerned with the development of instruments and methods that are specifically designed to accommodate the distinctive geographical and environmental conditions of Indonesia. Furthermore, the organization maintains technical proficiency in the operation and maintenance of sophisticated machinery, as well as specialized equipment that is tailored to a variety of environments, such as coastal, offshore, and inland waters.

There are numerous opportunities for the organization to improve its technological capabilities. The potential to enhance spill detection, prediction, and response strategies is substantial due to the adoption of emergent technologies, including artificial intelligence (AI), machine learning, and robotics. The development of innovative solutions that are specifically tailored to the requirements of Indonesia can be facilitated through partnerships with technology firms and research institutions. Additionally, by incorporating data analytics, cloud computing, and the Internet of Things (IoT) into its operations, the organization can leverage the potential for digital transformation. The company will be able to more effectively anticipate and prepare for spill incidents by utilizing big data and predictive analytics. The company is also able to access funding and support from government initiatives and international organizations that are dedicated to fostering technological innovation in environmental protection. Its capacity to remain at the forefront of the industry is further enhanced by its involvement in global partnerships and knowledge-sharing networks, which further enhances its ability to stay informed about the latest technological advancements.

The operations and sustainability of the Indonesian oil spill response services company are at risk due to numerous technological vulnerabilities and threats. Particularly for lesser organizations, the expenses associated with the acquisition, maintenance, and operation of sophisticated technologies can be prohibitively expensive. The company's reliance on imported technology exacerbates this challenge by increasing costs and creating vulnerabilities in the supply chain. However, the integration of new technologies with existing systems and processes also presents challenges, which may result in operational inefficiencies. Furthermore, the company's capacity to remain competitive may be impeded by financial constraints and a lack of local expertise, which could restrict its access to state-of-the-art technology. An additional risk is posed by the rapid tempo of technological advancements, as existing equipment and systems can rapidly become obsolete, requiring frequent and costly upgrades. In addition to investing in continuous training and skill development for its personnel, the organization must also adapt to these changes.

The company is confronted with external threats that could further confound its technological landscape, in addition to these internal vulnerabilities. The company's capacity to respond to accidents could be significantly compromised by the increased

reliance on digital systems, which exposes it to cybersecurity risks such as data breaches and potential subversion of critical response systems. In addition, the potential for inconsistent response efficacy in remote or underdeveloped areas of Indonesia is a threat posed by technological disparities across different regions. The company's market position may be compromised by competition from companies that possess more advanced or cost-effective technologies. Additionally, the rapid tempo of technological advancements may surpass the current regulations, resulting in potential legal challenges and uncertainty. Additional investments and modifications may be necessary to ensure compliance with both domestic and international technology usage standards. Finally, there are apprehensions regarding the environmental impacts of the deployment of specific technologies, such as chemical dispersants or heavy machinery. This could result in regulatory scrutiny, public backlash, and inquiries regarding the long-term sustainability of the use of these technologies in environmentally sensitive areas.

Conclusion

In summary, it is essential for a private oil spill response company in Indonesia to conduct an analysis of the external environment in order to effectively navigate the intricate and ever-changing industry landscape. The company can strategically position itself for growth and resilience by identifying opportunities and threats, remaining informed about regulatory changes, and understanding market dynamics. This analysis improves the organization's capacity to mitigate risks, adjust to technological advancements, and preserve a competitive advantage. Additionally, it enables the company to maintain a higher level of customer and stakeholder engagement, which is essential for the delivery of effective and compliant oil spill response services in a challenging environment and the ability to respond to external factors. For further research, it is important for companies to explore several areas such as regulatory evolution, market dynamics and competitiveness, climate change and environmental risks and global best practices and adaptation in order to have a deepen understanding and enhance strategic decision-making process.

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