

# Comparative Risk Analysis

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The risk event that will be focused on for the analysis is Human Error. The two companies selected for this comparison are BP, specifically in the context of the Deepwater Horizon oil spill, and Public Health England (PHE) with the case of the unreported Covid-19 cases due to spreadsheet limitations. Both instances are examples of human error leading to significant consequences.

Brief description of the background of each company

- **BP - Deepwater Horizon Oil Spill**

- Background and Industry: **BP** is a global oil and gas company, one of the world's seven oil and gas "supermajors." It was established in 1909 as the Anglo-Persian Oil Company and has since grown into a multinational corporation with operations in exploration, production, refining, distribution, and marketing of oil and gas.
- Revenue Generation: **BP** makes money primarily through the extraction and sale of fossil fuels, as well as through the operation of gas stations and the sale of petrochemical products.
- Operations: **BP** operates in all corners of the globe, with significant operations in the UK, US, Russia, and other parts of the world.

- **Public Health England (PHE)**

- Background and Industry: Public Health England was an executive agency of the Department of Health and Social Care in the UK, established in 2013. It was responsible for public health protection and improving the nation's health and wellbeing.
- Revenue Generation: As a government agency, **PHE** was funded by the UK government and did not operate for profit.

- Operations: **PHE** operated within the United Kingdom, providing services and expertise to local and national government, as well as to the NHS.

Reflect on the risk management process model and evaluate every step for organizations.

- Risk Management Process Evaluation

- Risk Identification:

- **BP:** Prior to the Deepwater Horizon spill, **BP** identified various operational risks but may have underestimated the risk of a deepwater oil spill.
- **PHE:** The risk of data handling errors was likely identified, but the specific risk of using outdated file formats leading to data loss was not adequately addressed.

- Risk Analysis:

- **BP:** The analysis of the risks associated with deep-water drilling may not have fully considered the potential scale and impact of a catastrophic spill.
- **PHE:** The analysis of risks related to data management may have failed to consider the limitations of the systems in use and their potential for causing significant data errors.

- Risk Evaluation:

- **BP:** The evaluation of drilling risks may have been influenced by financial considerations, leading to an acceptance of higher risk levels.
- **PHE:** As a public health organization, the evaluation of risks would have been focused on public health impact, but the technical risks may not have been given enough weight.

- Risk Treatment:

- **BP:** Risk treatment measures such as safety checks and emergency response plans were in place but proved inadequate in the face of the spill.
- **PHE:** The reliance on outdated technology without adequate backup or redundancy measures was a gap in risk treatment.

- Monitoring and Review:

- **BP:** Monitoring and review processes existed but may not have been sufficiently robust to prevent or quickly mitigate the spill.
- **PHE:** Monitoring of data systems and processes was insufficient to prevent the spreadsheet error from occurring.

Described and compared how they responded to the risk. What did they do when risk event happened and in the days after?

- BP's Response:

When the Deepwater Horizon oil spill occurred on April 20, 2010, **BP** immediately initiated a response plan. The company mobilized a flotilla of vessels and resources, including remotely operated vehicles (ROVs) and a nearby drilling rig to drill a relief well if necessary. According to (U.S. ENVIRONMENTAL PROTECTION AGENCY OFFICE OF INSPECTOR GENERAL) **BP** also activated an extensive oil spill response in the Gulf of Mexico, with the goal of containing the oil spill and resolving the situation as rapidly, safely, and effectively as possible.

In the days following the spill, **BP** worked to contain the oil on the surface, using dispersants to break down the oil and make it easier to clean up. The company also employed skimmers, tugs, barges, and recovery vessels to remove the oil from the water. By May 29, 2010, over 69 vessels were in use, and by June 2010, approximately 47,000 people and 7,000 vessels were involved in the response efforts.

**BP's** response to the spill was criticized for being slow and inadequate, particularly in the early stages of the disaster. The company faced significant public and governmental backlash, with many feeling that **BP** did not do enough to contain and clean up the oil spill.

**BP** continued to work on cleaning up the affected areas and compensating those affected by the spill. The company also faced significant financial consequences, with cleanup and response costs exceeding \$14 billion by January 2013.

- **PHE's Response:**

(Crises Control, 2023) indicates that Public Health England's response to the unreported Covid-19 cases due to spreadsheet limitations was to acknowledge the error and work to rectify the data and improve processes. The agency improved its data management processes and moved away from the outdated file format.

Overall, **BP's** response to the Deepwater Horizon oil spill was more comprehensive and involved a larger scale of resources compared to Public Health England's response to the Covid-19 data error. However, **BP's** initial response was criticized for being slow and inadequate, while Public Health England's response was more focused on rectifying the error and improving processes.

What according to me, was their contingency plan?

- **BP's** contingency plan likely included spill response measures and public relations strategies, but the scale of the disaster overwhelmed these plans.
- (Ryan Sibley) highlights that **BP's** contingency plan for the Deepwater Horizon oil spill was not as comprehensive as it could have been. The company had a regional response plan that covered the Gulf of Mexico, but it did not have a site-specific response plan for the Deepwater Horizon rig. **BP** calculated the volume of oil spilled at 160,000 barrels per day, which exempted the company from having to prepare a site-specific response plan. However, this lower figure was based on a reported decrease in the rig's "worst-case scenario discharge".
- The lack of a site-specific response plan was a significant oversight. The Deepwater Horizon oil spill was a unique event, and a site-specific plan would have provided more

detailed information on the specific risks and response strategies for the rig. The regional response plan did not account for the specific challenges and complexities of the Deepwater Horizon incident.

- In the event of a spill, **BP's** plan included several strategies and tactics to minimize potential impacts, such as protecting people, the environment, property, and business.
- However, the plan was not executed effectively due to various factors, including inadequate inspections and safety enforcement by the Minerals Management Service (MMS).
- In summary, **BP's** contingency plan for the Deepwater Horizon oil spill was not comprehensive enough, and the lack of a site-specific response plan contributed to the inadequate response to the disaster.
- **PHE:** **PHE's** contingency planning for data errors may not have been robust, as evidenced by the significant oversight in using an outdated file format. We can infer that **PHE** did not adequately address the specific risk of using outdated file formats leading to data loss. This suggests that **PHE's** contingency plan may not have included robust measures to prevent or mitigate the impact of using outdated file formats.
- **PHE's** response to the unreported Covid-19 cases due to spreadsheet limitations was to acknowledge the error and work to rectify the data and improve processes. (Crises Control, 2023) explains that the agency improved its data management processes and moved away from the outdated file format. This response indicates that **PHE** may have had some measures in place to address data errors, but these were not sufficient to prevent the specific risk of using outdated file formats leading to data loss. It is likely that **PHE's** contingency plan did not include robust measures to prevent or mitigate the impact of using outdated file formats, as evidenced by the unreported Covid-19 cases due to spreadsheet limitations.

Compare and contrast for what each company did right and what each company did wrong? In their risk response/risk management practices.

- What Each Company Did Right:
  - **BP:** Implemented a comprehensive cleanup operation and eventually provided significant compensation to affected parties.
  - **PHE:** Quickly acknowledged the error and took steps to correct the data and improve processes.
- What Each Company Did Wrong:
  - **BP:** Underestimated the risk and impact of a major oil spill and had inadequate safety measures in place.
  - **PHE:** Used outdated technology for critical data management, leading to a significant public health reporting error.

Reflection on how these Leaders responded to the risk event. What changes I would make when I am a leader?

### **Leadership Reflection**

From **BP's** and **PHE's** experiences, underestimating risks and failing to keep technology and processes up to date can lead to catastrophic outcomes. As a leader, I would prioritize continuous risk assessment, including the potential impact of human error, and ensure that all systems and technologies are current and robust enough to handle critical operations. I would also foster a culture of transparency and accountability, where errors are quickly acknowledged and rectified, and lessons are learned to prevent future occurrences.

When reflecting on the leaders' responses to the risk events, it is essential to focus on specific aspects such as communication, decision-making, and accountability. These aspects are crucial in understanding the effectiveness of the leaders' responses and identifying potential areas for improvement.

- **BP - Deepwater Horizon Oil Spill**

- Communication: **BP's** communication during the Deepwater Horizon oil spill was initially criticized for being slow and downplaying the severity of the spill. The company faced significant public and governmental backlash, which could have been mitigated with more transparent and timely communication.
- Decision-making: **BP's** decision to drill in the Gulf of Mexico, despite the risks and potential consequences, can be seen as a failure in risk assessment and decision-making. The company may have underestimated the risks and the potential impact of a deepwater oil spill.
- Accountability: **BP's** response to the spill was also criticized for its lack of accountability. The company faced significant fines and legal action, which could have been mitigated with a more proactive and accountable approach to risk management.

- **Public Health England PHE**

- Communication: **PHE's** response to the unreported Covid-19 cases due to spreadsheet limitations was to acknowledge the error and work to rectify the data. The agency's communication was transparent and focused on addressing the issue.
- Decision-making: **PHE's** decision to use outdated file formats for critical data management can be seen as a failure in risk assessment and decision-making. The agency may have underestimated the risks associated with using outdated file formats and the potential impact on public health.
- Accountability: **PHE's** response to the data error was focused on rectifying the issue and improving processes. The agency's approach to risk management was more proactive and accountable compared to **BP's** response to the Deepwater Horizon spill

## Lessons Learned and Changes as a Leader

From these examples, effective communication, decision-making, and accountability are crucial aspects of a leader's response to risk events. As a leader, I would prioritize:

Ensuring transparent and timely communication during risk events to maintain stakeholder trust and manage public perception. I would foster a culture of transparency and accountability, where errors are quickly acknowledged and rectified, and lessons are learned to prevent future occurrences.

Addressing the issue as (DeMott, 2014) states that One thing to remember is that these are unintended errors, which can result in limited or no impact or they can result in a spectacular failure event.

(Pirani Risk, n.d.) suggests that conducting thorough risk assessments including the potential impact of human error and ensure that all systems and technologies are current and robust enough to handle critical operations, considering potential consequences before making critical decisions. Taking responsibility for risk management and implementing measures to mitigate risks and prevent future occurrences.

By focusing on these aspects, leaders can respond more effectively to risk events and minimize the impact on their organizations and stakeholders.

## **Bibliography**

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BP had no plan for Deepwater Horizon disaster  
by [Ryan Sibley](#)