A RiskOnBoard Case Study



British Petroleum DeepWater Horizon Rig Explosion – A Preventable Accident

86 Days, 4.9M Barrels, Huge oil spill, 2010

The Situation

At 5:45 pm, on Tuesday, April 20th, 2010, an explosion rocked and set afire the Deepwater Horizon drilling rig in the waters of the Gulf of Mexico, beginning a human, economic, and environmental disaster. Eleven crew members died, and others were seriously injured, as fire engulfed and ultimately destroyed the rig.

As the rig failed and sank, the Macondo well was left open, leaking oil into the Gulf of Mexico water for 86 days until sealed after a few failed tries. Almost five million barrels of crude oil leaked in to the sea.

In setting the context, there are some noteworthy events from the past decade:

- In 1998, BP merges with Amoco and buys Texas
 City refinery in a \$50B deal. This was the first
 significant move of establishing presence in the
 North American chemical, oil and gas and refining
 markets.
- In 2000, BP launches its 'Beyond Petroleum'
 campaign, changes its logo, and invests \$200
 million. The goal was to present the company as
 environmentally friendly organization and to stand
 out of the traditional heavy petroleum image.
- In 2005, the second largest oil refinery in the US, BP's Texas City Refinery, exploded. 17 workers were killed and 170 wounded.
- In 2006, there was a major oil spill from a badly corroded BP pipeline in Alaska.
- Tony Hayward was appointed CEO in 2007, in part as a response to the 2005 explosion. One of Hayward's strategies was to "Make Safety Come First".
- In 2009, BP was charged with 709 safety violations in regards to the 2005 explosion, and was fined.

- In April 2010, in the Gulf, the Macondo drilling was \$58M over budget and six weeks behind schedule
- On the night of April 20th, the well blew out because a number of separate risk factors and outright mistakes combined to overwhelm the safeguards that meant to prevent just such an event from happening.
- The National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, in their report to the 'Report to the President', found:
 - Most of the mistakes and oversights at
 Macondo can be traced back to a single
 overarching failure—a failure of management.
 - Improving the ability of individuals involved to identify the risks they faced, and to properly evaluate, communicate, and address them, would almost certainly have prevented the blowout
 - "A blowout in Deepwater was not a statistical inevitability."
- This was clearly one of the largest environmental disasters in US history.

The Outcome

- Loss of lives as 11 employees died.
- Damage to the environment as the massive oil spill spread into the Gulf of Mexico.
- \$40B estimated to cover Macondo explosion costs.
- BP had to sell \$30B of its assets to cover costs, and to suspend dividend for the first time in 20 years.
- BP's reputation was severely damaged.
- CEO, Tony Hayward stepped down. BP nominated Robert Dudley as the first American born CEO.

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Questions to Consider...

(Consider both these questions, and the possible implications for you in your situation.)

- Why did it take so long, 86 days, to seal the well? Should the company have been better prepared for such events and have plans in advance? Do other companies have better plans?
- How did the fact of the drilling being over budget and time, affect BP's decision makers on and offshore in pushing forward missing some red flags along the way?
- The actual events and sequence of events involved a small number of specialized companies including Halliburton (deep water drilling expertise), and Transocean (the rig owner/operator) under BP's management. Did BP do the job of managing these specialists, or did they outsource too much risk to them?
- What actions had been taken following the Texas refinery explosion and the Alaska oil spill in 2005 and 2006, to prevent a third catastrophic event?
- Did Tony Hayward do a good job to Make Safety Come First?
- Given that one operational malfunction caused loss of lives, injuries, environmental damage, and a \$30B strategic retrenchment, is BP's risk tolerance and risk management sound?

Which Risk Topics Most Relate For You?

- Loss of Employee Lives
- Environmental Disaster
- Core Operation and Equipment Failure
- Reputation Risk
- Having to suddenly change course and sell \$30B of assets to cover bills
- Board Risk Processes