

# Mini Workshop - Risk Management in Projects

## Lessons from Case Studies



**PMI NIC  
June 12th, 2019  
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- *Dig the well before you are thirsty*
  - A Chinese proverb
- *"Better a live donkey than a dead lion."*
  - Shackleton
- *I learned that danger is relative, and the inexperience can be a magnifying glass.*
  - Charles A. Lindbergh
- *Only those who risk going too far can possibly find out how far one can go*
  - T.S. Eliot

**“Lessons From the Past that Assist the Projects of Today to Shape the World of Tomorrow”**

[www.lessons-from-history.com](http://www.lessons-from-history.com)

<http://learn.genxus.com/>

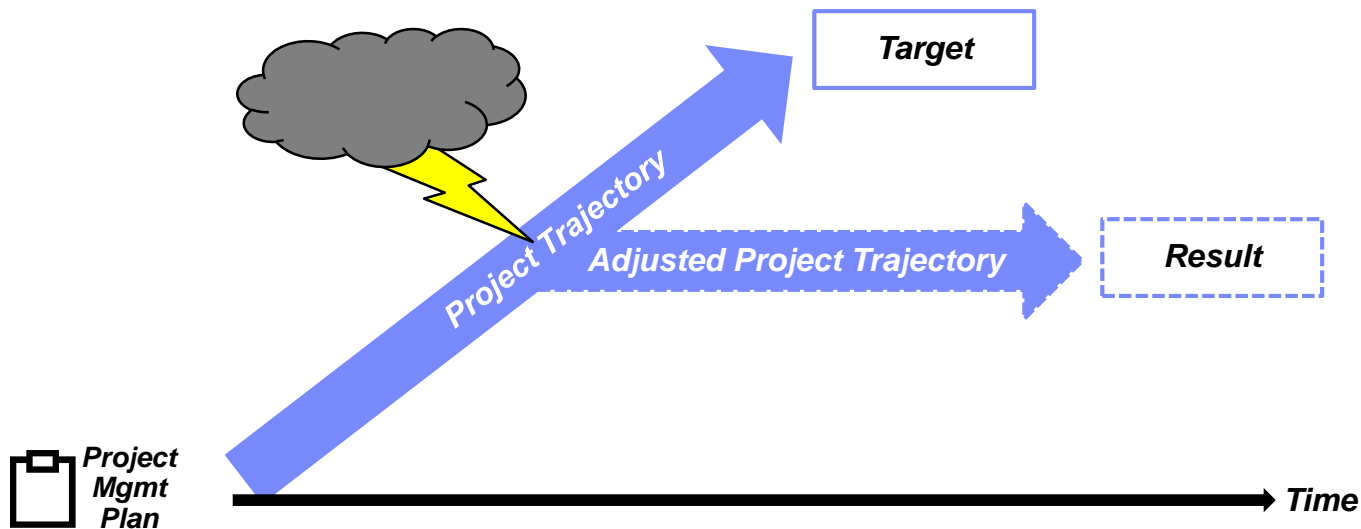
# Agenda

Timing	Description
10:30	Introduction - Risk Management and projects
10:35	Case study #1 Race to the South Pole
10:45	Exercise – by groups (2 risk assessments + presentation)
11:15	Case study #2 Risk Tolerance (Lindbergh & the Orteig Prize, 1926-1927 CE)
11:25	Exercise – by groups (risk assessment + presentation)
11:55	Applying Risk Management in projects & the near future
12:05	Q & A
12:15	Wrap up



# What is risk management in projects?

- Captures, surfaces, escalates, and provides analysis and monitoring of risks that jeopardize the attainment of a milestone or benefit.
  - (PMBOK Knowledge Areas)
- Uncertainty that matters
  - David Hillson (Risk Dr)
- Undesirable influence of uncertainty on achievement of planned results.



## What is risk management in projects?

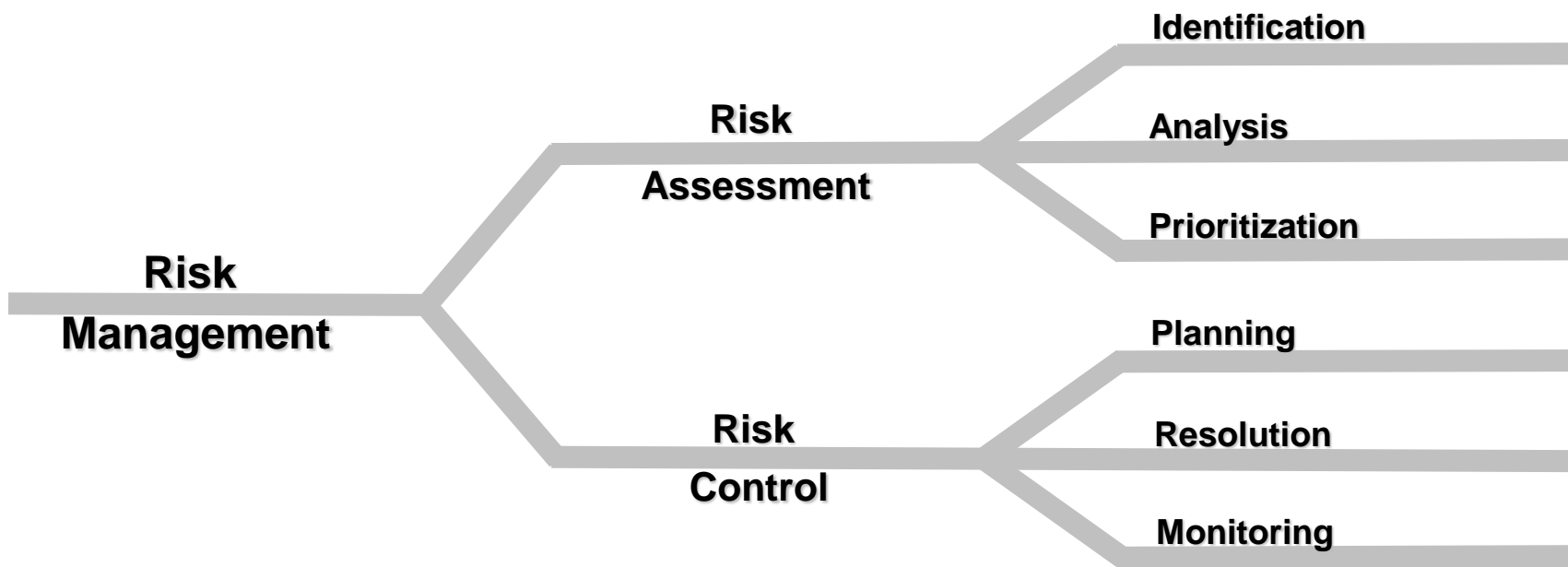
- **“A logical and systematic method of identifying, analyzing, assessing, treating, monitoring & communicating risks in a way that will enable organizations to minimize risk and maximize opportunities”**
  - Provides rational basis for decision making for all risks.
  - Control of possible future events, proactive vs reactive.
  - Reduces likelihood of event occurring & magnitude of its impact.

# How do we handle risk management in projects?



- ① Risk Management Planning
- ② Risk Identification
- ③ Risk Qualification Analysis
- ④ Risk Quantification Analysis
- ⑤ Risk Response Planning
- ⑥ Risk Monitoring and Control

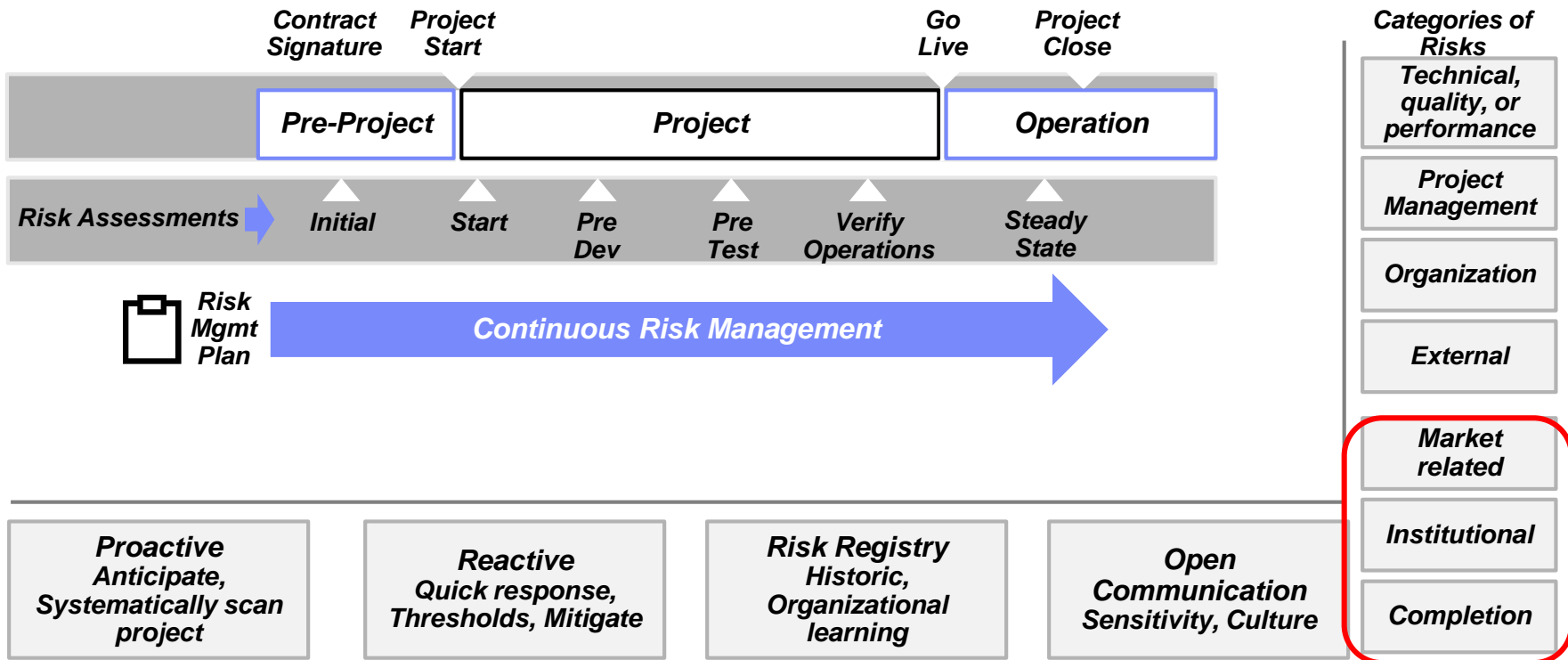
# Another view - risk management is both assessment and control



# Going through the case studies for risk you will see a spectrum of scenarios (Worst to Best) for managing risk

<b>(WORST) Crisis management/ Fire fighting:</b>	<b>(BAD) Fix on failure:</b>	<b>(OKAY) Risk Mitigation:</b>	<b>(GOOD) Prevention:</b>	<b>(BEST) Eliminate Root Causes:</b>
Addressing risk after the fact and problem occurs	Finding and addressing as they occur	Plan ahead & allocate resources to address risk that occur, but don't eliminate them before they occur	Part of the plan to identify and prevent risks before they become problems	Part of the plan to identify and eliminate the factors that make specific risks possible

# Risk Management Planning: Keeping project on track by managing all risks



- Risk Management is Time dependent and based on the spectrum of project situations



## Workshop - Case Study

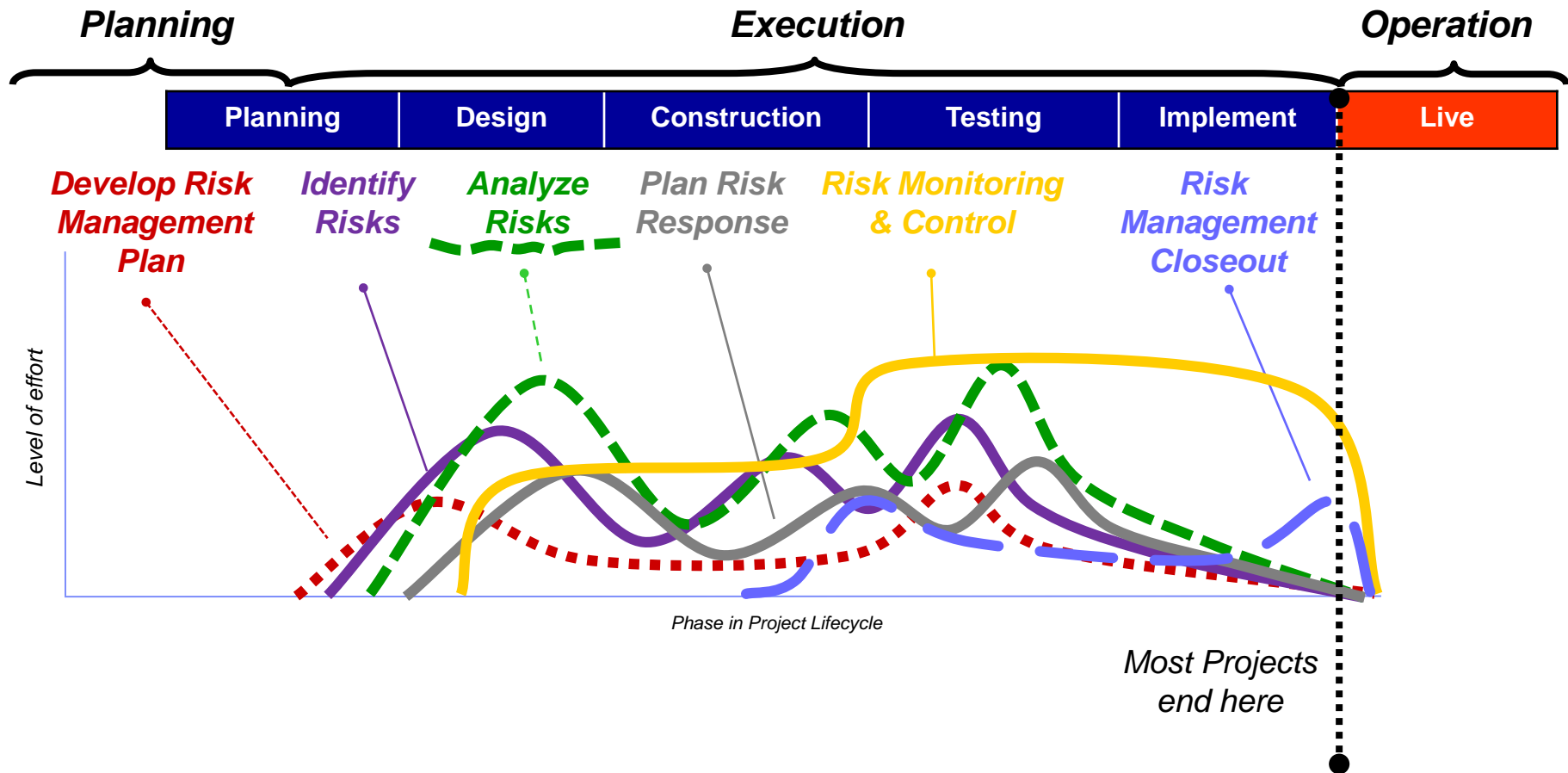
- Lessons from  
the Race to the  
South Pole  
Project



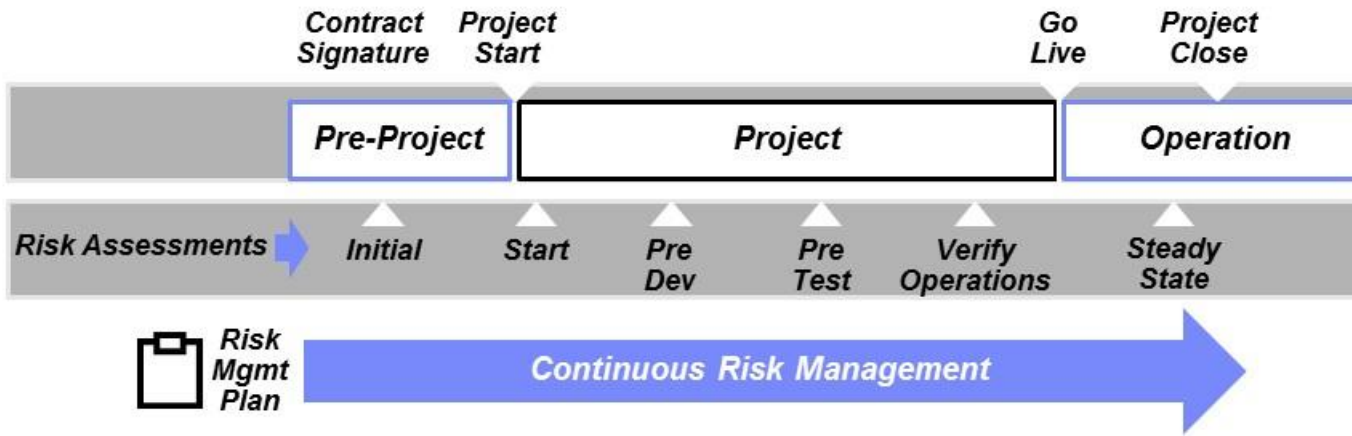
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# In today's projects risk management should be continuous through each project stage

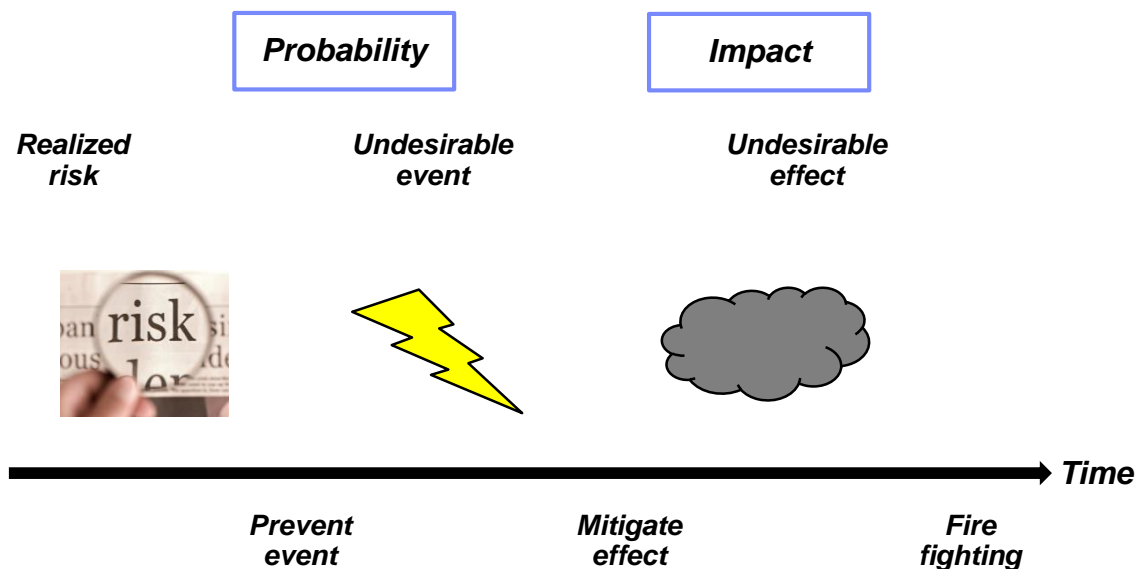


# Risk Monitoring and Control - Make it a part of your process & project plan



- Risks and potential impact changes throughout project
- Keep an evolving “TOP 10 RISKS” list
- Review the list frequently
- Monitor metrics - cost, schedule, earned value
- Refine... Refine... Refine...

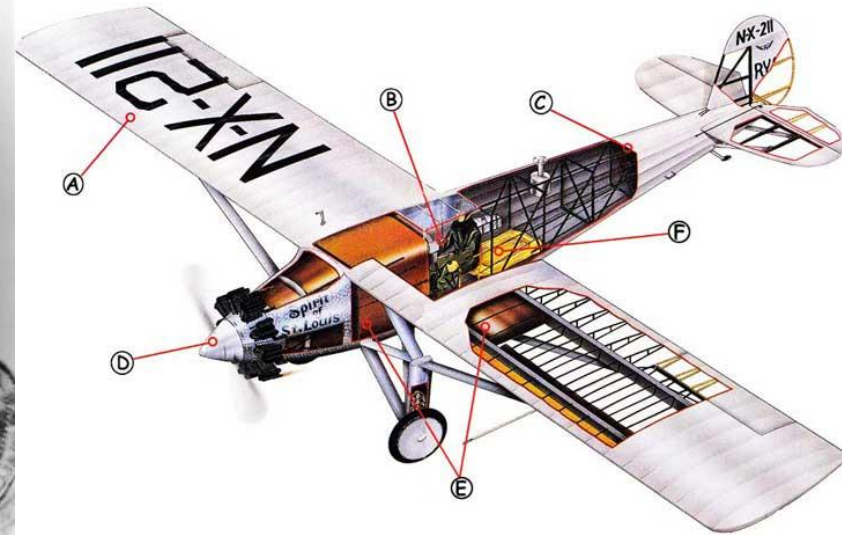
# Prevention or Eliminate Root Causes? Timing is critical, the earlier the risk is identified



- The aim is to minimize adverse effects of risks on the project
- Preventing the event – take action, keep at it
- Firefighting requires actions outside of the project scope



## Workshop - Case Study Lessons from Lindbergh Projects

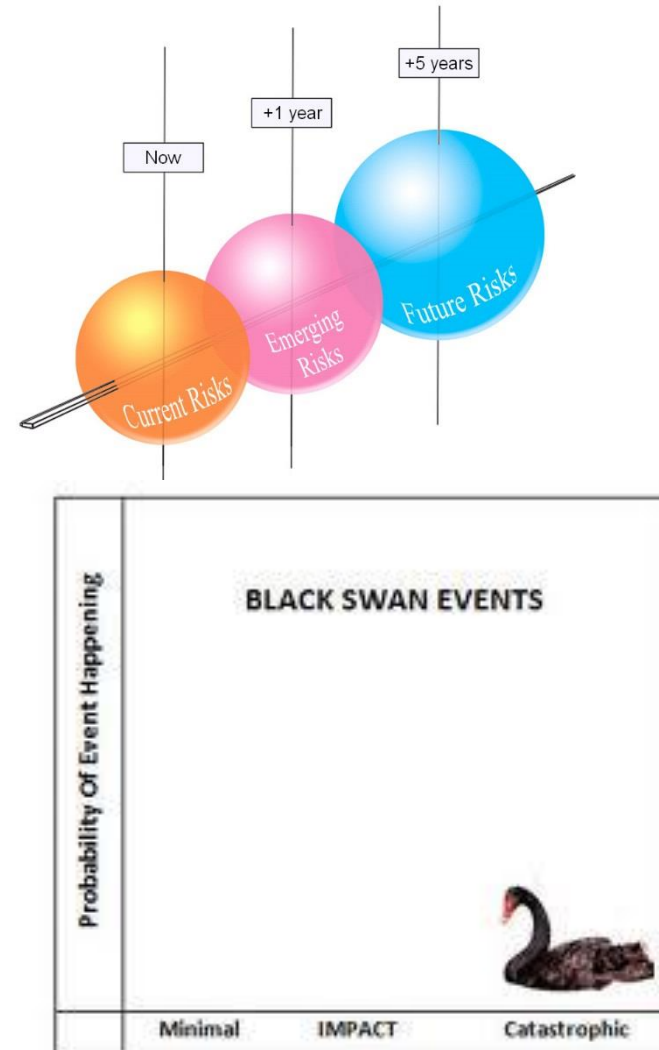


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# Three types of risks that projects face

- **‘Known risks’** identify, seek to avoid, plan for and mitigate
- **‘Emerging risks’** on radar, but full extent and implications not clear
- **‘Black swans’** risks cannot be predicted, avoided and occur at irregular intervals



# Uncertainty – What is it? How is it managed?

- **Uncertainty represents situations which are not fully understood in terms of causal forces and potential outcomes. So, odds are known for risks but not for uncertainty.**
- **Assumptions**
  - Define for each activity
  - Register all as so to deliver the project plan
  - Risks are linked to assumptions
  - Useful way of eliminating uncertainty

# Intelligent Risk Taking

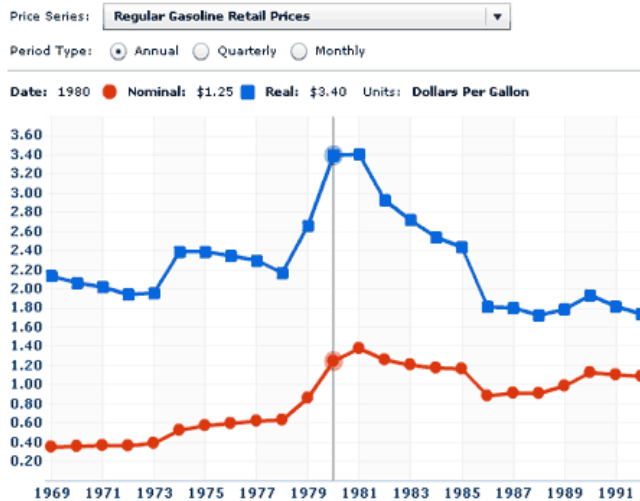
- **By increasing risk tolerance you can change time constraint**
  - Lindbergh - redefined risk appetite & tolerance levels
    - Don't expect zero incidents but to be within a tolerable range
- **With proactive scenario planning**
  - Shell Oil
- **Selecting best project risk response strategies**





# Predicting risk through proactive Future Scenario Planning case study

- **Oil shocks were predicted**
  - 1973 Arab-Israeli War
  - 1979 Iranian revolution



# Predicting risk through proactive Future Scenario Planning, made famous by Royal Dutch/Shell in the 1970s

## ■ Anticipating dramatic changes

- implemented strategies before Oil embargo 1973, Oil crash in 1979.
- handled challenges better and faster than competition.
- moved from 8<sup>th</sup> to 2<sup>nd</sup> biggest oil company.
- only company to ride out events successfully.

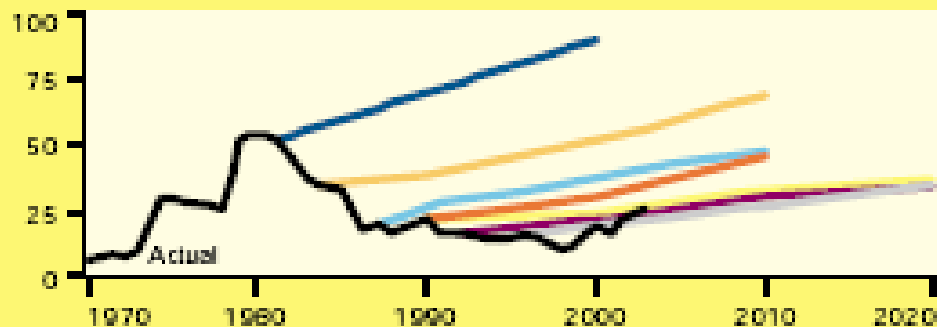


### Oil price forecasting has failed

The oil industry's expectations in:

■ 1981    ■ 1984    ■ 1987    ■ 1989  
■ 1991    ■ 1993    ■ 1995

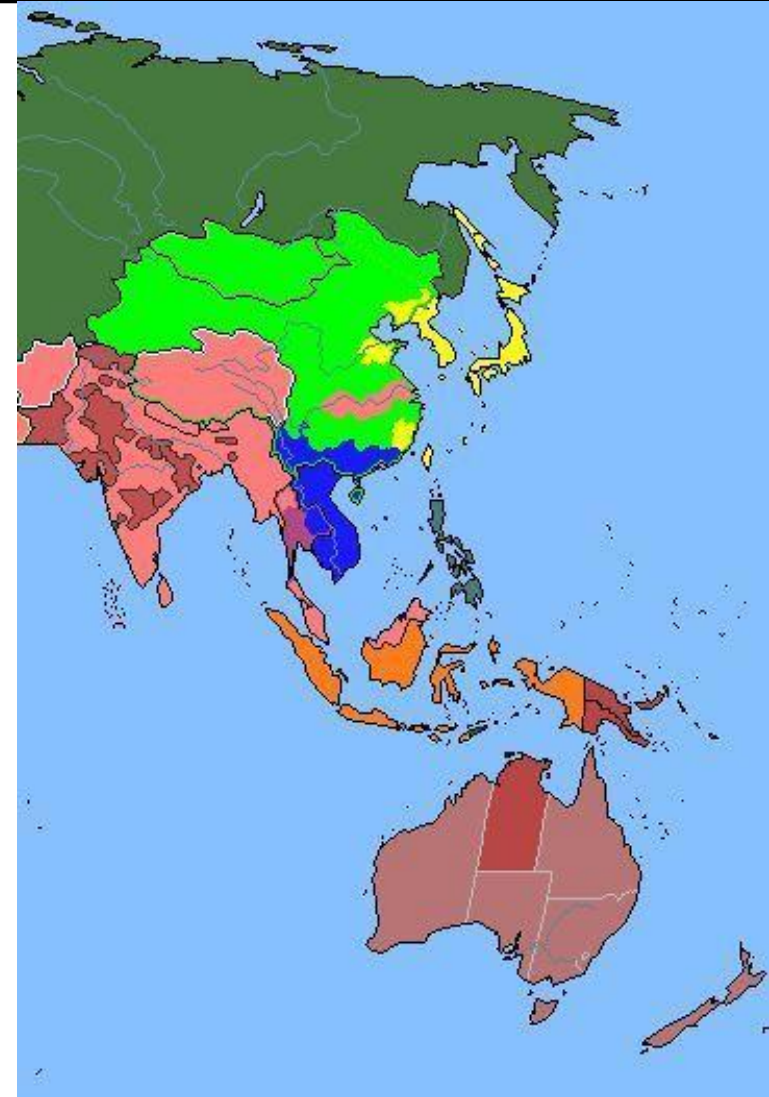
US\$/bbl (1990)



Source: EnergyModellingForum

## Rainbow Plans (5) – Blueprint for the Pacific War in 1940s Equivalent to today's future scenario planning

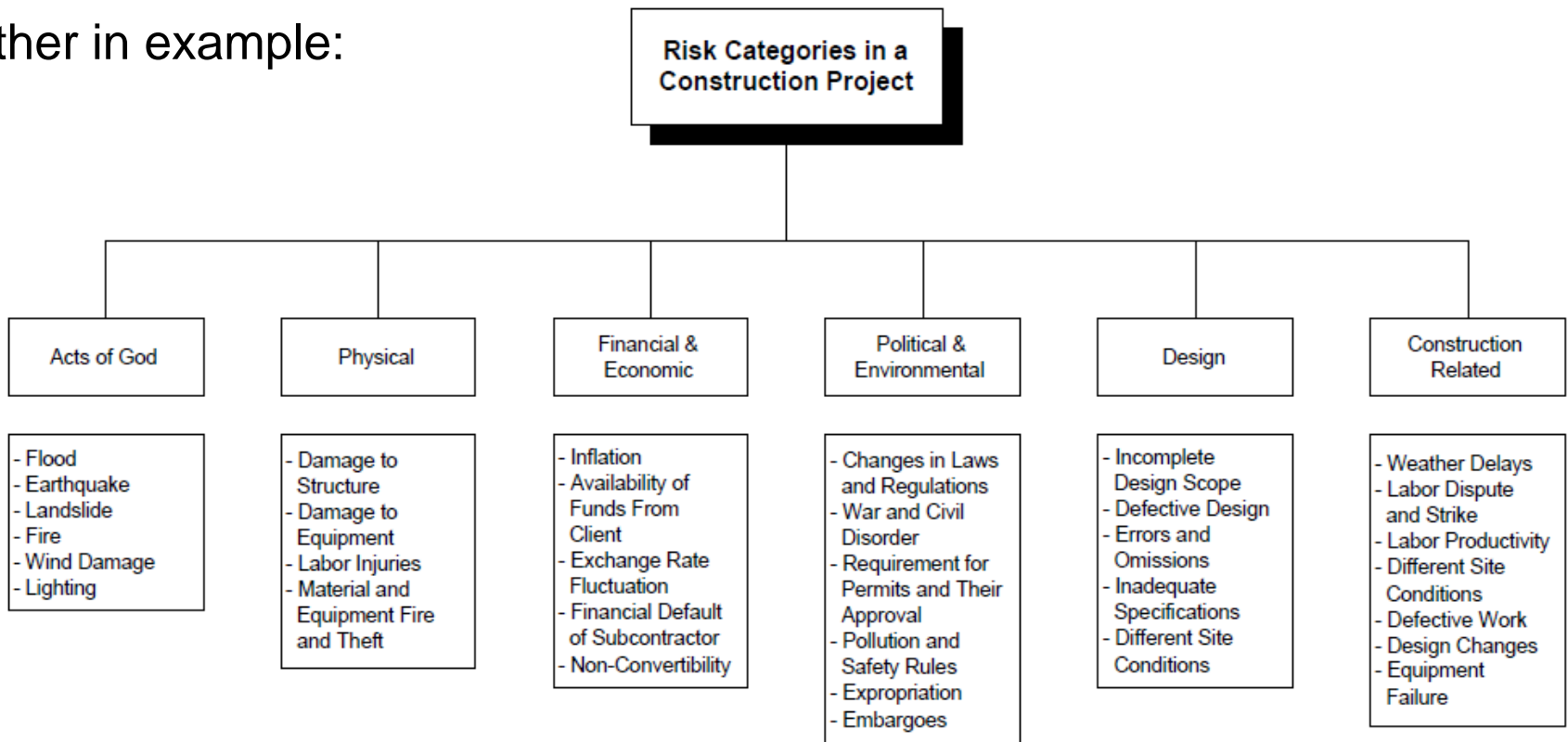
- **US Navy plan for war in Pacific**
  - Developed 1920/1930s
- **Colors indicated other nations**
  - British, Dutch, French, Japanese, Chinese
- **Rainbow 5 correctly anticipated:**
  - Co-operation with Allies was necessary
  - The main thrust of Japanese tactics
  - Did NOT foresee an attack on Pearl Harbor



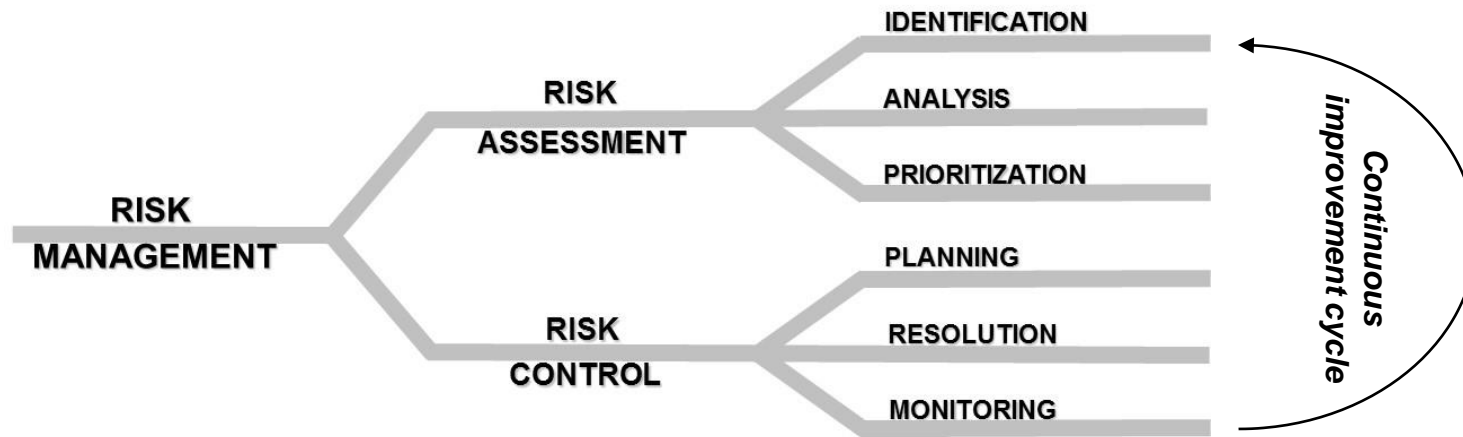
# Modeling Risk through multiple lenses of different categories - important in meeting multiple stakeholder objectives

## ■ Highlight where to focus attention on

- contractual, organizational, operational, performance, finance, social, (community, sustainability) and cultural
- other in example:



# Other risk measures - Continuous improvement related to risk processes – ROLE of the PMO



- Requires a plan to be developed for the progressive enhancement of the organization’s project risk management practices and competencies

# Going through the case studies for risk we have seen a spectrum of scenarios (worst to best) for managing risk

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# Conclusions – thoughts to leave with related to Project Risk Management

- **It should be about maximizing opportunities**
  - Be risk aware, not risk averse
- **Keep it simple and relevant to the project**
  - Avoid complicated processes and bureaucracy
  - Engage your project team
  - Revisit often
  - Integrate into project



# Thanks!



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