Risk Management: There Are No Black Swans

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Black Swans

- Karl Popper: “The Logic of Scientific Discovery”
  - Black swans thought not to exist by British ornithologists
  - Until they went to Australia and found some
- A universal statement about an infinite set (there are no black swans)
  - Cannot be proven by confirmations.
  - Can be disproven by a single refutation
- Black swans are about disproving scientific theories

Black Swans as abused today

- Risk managers excuse risk acceptance
- Or fail to do a thorough job of risk identification
- Or fail to do a decent job of guessing frequency
  - Who could have ever predicted 9/11?
  - Lots of people did
- 9/11 was not a black swan event
  - Neither was the Heartland breakin
  - Neither was the tape loss at Providence
  - Neither was the VA loss
- They were (bad) risk management decisions

So what's the problem?

- Either:
- Risk management is **ignoring** lots of event sequences with potentially serious negative consequences
  - It cannot be said to be an accident
  - At best it is a case of incompetence
- Or:
- They are **just flat lying** about what took place
  - Who could have ever known?
  - Any competent risk manager

What went wrong

- Likely: The risk was not identified in the risk management process
- Likely: The risk was identified but not properly characterized (e.g., rated as low probability)
- Likely: The risk was identified and accepted by management
- Likely: The risk was identified but not mitigated adequately
- Very unlikely: Nobody could have known - it was a black swan

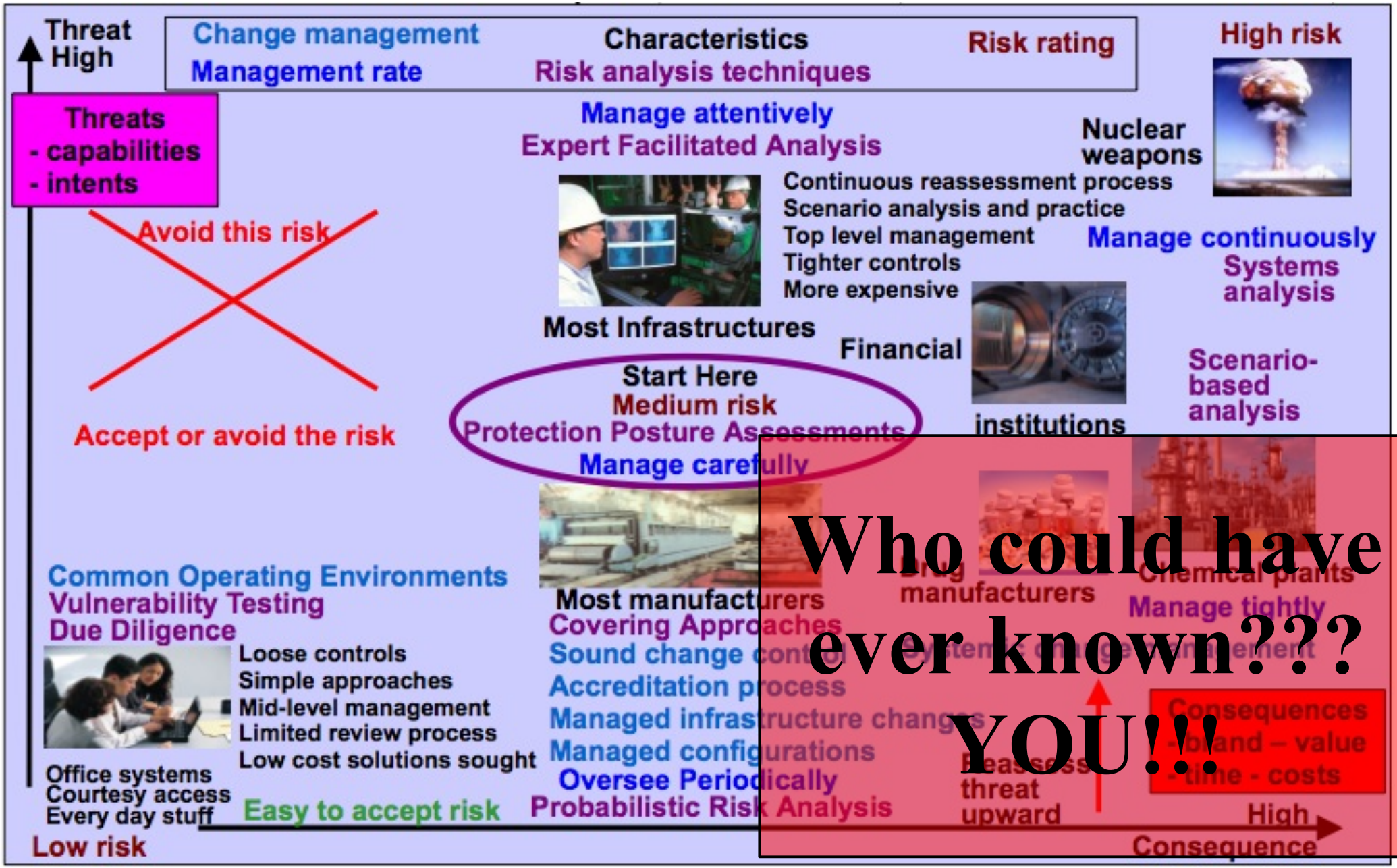
What was your last Black Swan?

- Audience participation mandatory
  - When was it?
  - What happened?

How do we stop this?

- IF:
  - They are **just flat lying** about what took place
- THEN:
  - **Expose their lies for what they are – or I will!**
- OTHERWISE:
  - Risk identification error – identify better
  - Risk rating error – rate better
  - Risk acceptance – admit and explain properly
  - Risk mitigation error – mitigate better

The big picture: the rating error



Who could have ever known??? YOU!!!

Risk identification – start here

- http://datalossdb.org/
- http://all.net/ -> Database (click “go”)
- COSO (or what it's supposed to be)
- Hire a real consultant to do a thorough review
- Look things up on the Internet
- Read the local paper
- Watch the news
- Think!!!

Risk mitigation

- Failure to mitigate known risks in a timely fashion is an enterprise process error
  - Fix the process to prevent future errors
  - Try to do it before they happen
- Or – it could be simply a budget limitation
  - Which is somehow fixed for a period after a major loss is published
  - And yet the mitigation rarely meets the problem
- There is a major disconnect between
  - The cause of the failure
  - The mitigation chosen

Disconnect example

- Heartland Payment Systems – the cause
  - The breach was from an SQL injection
  - Basically a failure to check inputs
- Heartland Payment Systems – the solution
  - End-to-end encryption
  - Basically encrypt the data to limit consequences
- But the solution does not address the cause!!!
  - So they will likely get more such break-ins
  - And other things will happen to them
  - They are shooting at the wrong target

Admit it!!!

- We all accept risks all the time
- There should be a defined reason for it
- Use the PR department to show why!!!
  - It was a simple liability decisions...
  - And you will have to pay the price for the loss
- But you won't lose 75% of shareholder value
  - And retain the 50% loss over time
- Or you can try the other PR approach
  - Fire the technologist – keep the executives
  - After all – they play golf with you!

The alternative

Your name here next year!!!

Thank You

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