Risk Management: There Are No Black Swans CBA – February 2, 2010

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California Sciences Institute 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

California Sciences Institute 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

California Sciences Institute So what's the problem?

- Either:
- Risk management is <u>ignoring</u> 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

California Sciences Institute What went wrong

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

California Sciences Institute What was your last Black Swan?

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

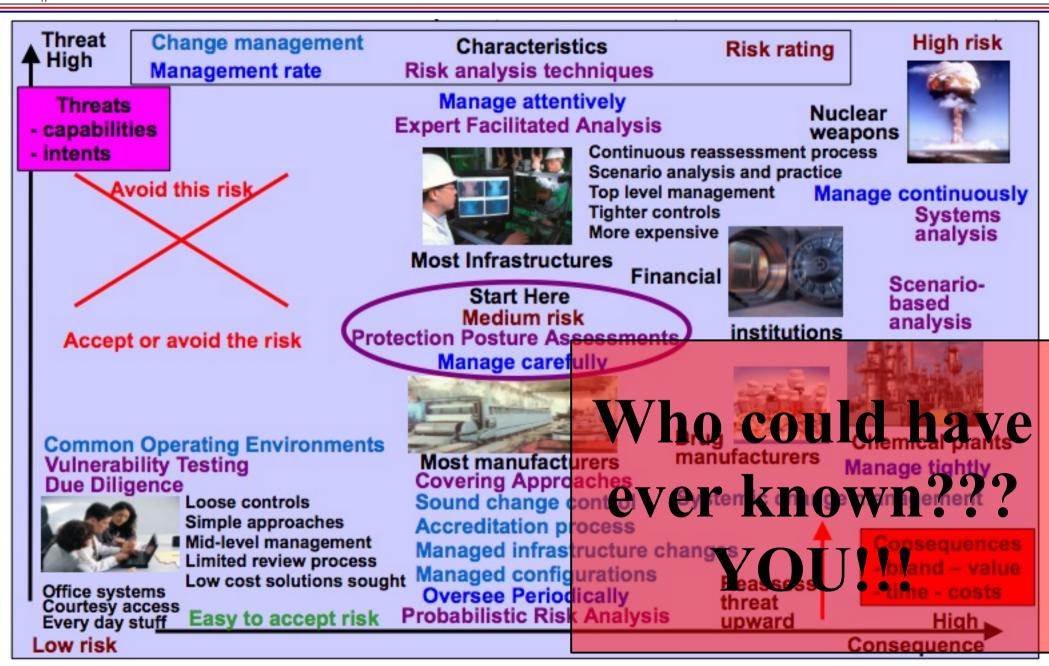


California Sciences Institute How do we stop this?

- 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

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The big pic

The big picture: the rating error



California Sciences Institute 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!!!



California Sciences Institute 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

California Sciences Institute 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!

California Sciences Institute The alternative



Your name here next year!!! California Sciences Institute

Thank You



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