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How Culture Affects ERM

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Decisions, Decisions...



**I will do everything I can to save the company
57 cents including putting customer's lives at
risk**

**I will lie to, deceive, and obstruct anyone who
attempts to uncover product faults so our
company can save \$130 per unit**



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Top ERM Problems

Organizational culture drives undesirable behavior

- “ERM’s job is to protect the balance sheet”
- Normalized deviance is a warning sign of impending disaster
- Discourage risk reporting

Improper valuation of risk impact

- Monetizing risk impact
- Qualitative risk impact
- Ignoring risk impact

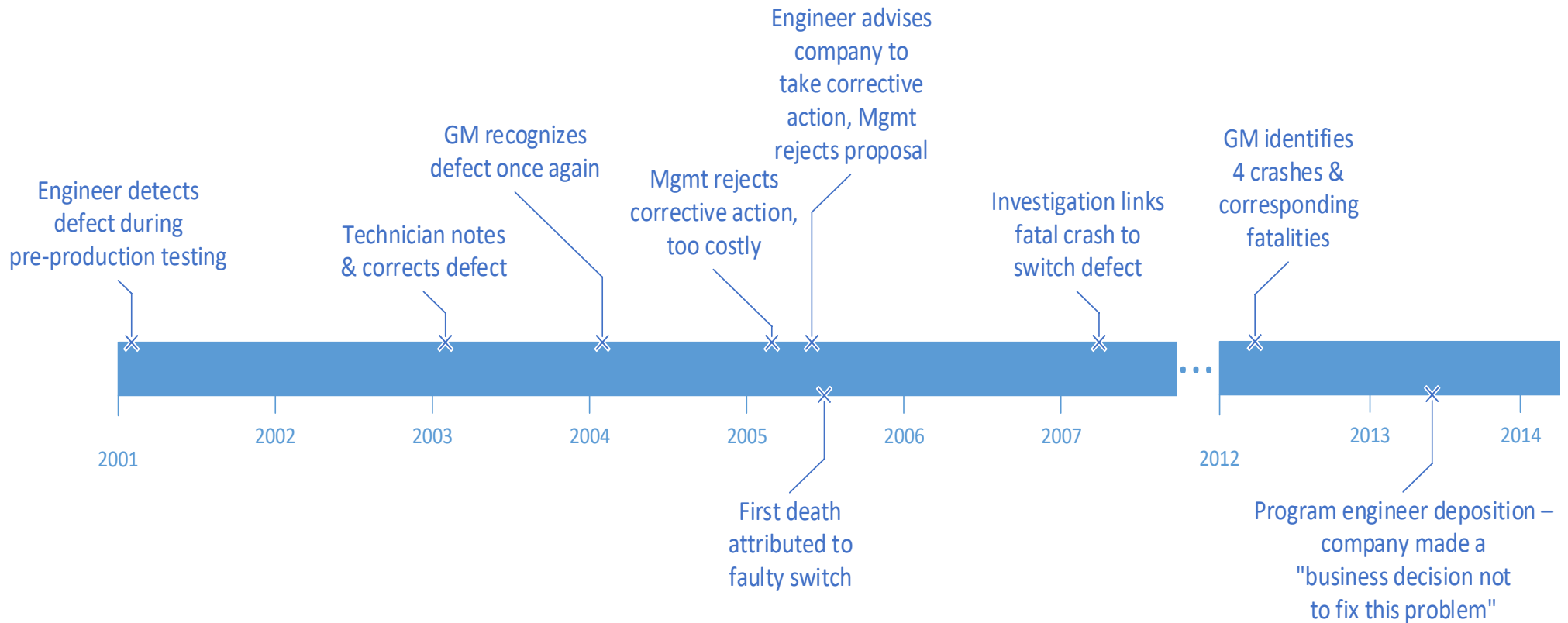


High Profile Risk Management Failures



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General Motors Ignition Switch Failure



General Motors Ignition Switch Failure

- By 2015 switch defect cost GM \$4.1 billion
- Action prior 2004 would have avoided recall cost
- Action in 2004 could have been confined recalls to 4,100 Ions



\$4.4M
2004 recall
cost

51
Deaths

\$.57
Cost of
correct
switch



General Motors Ignition Switch Failure

- ✓ Protect the balance sheet
- ✓ Normalized deviance
- ✓ Discourage risk reporting
- ✓ Monetizing risk impact
- Qualitative risk impact
- ✓ Ignoring risk impact



Toyota Accelerator Defect

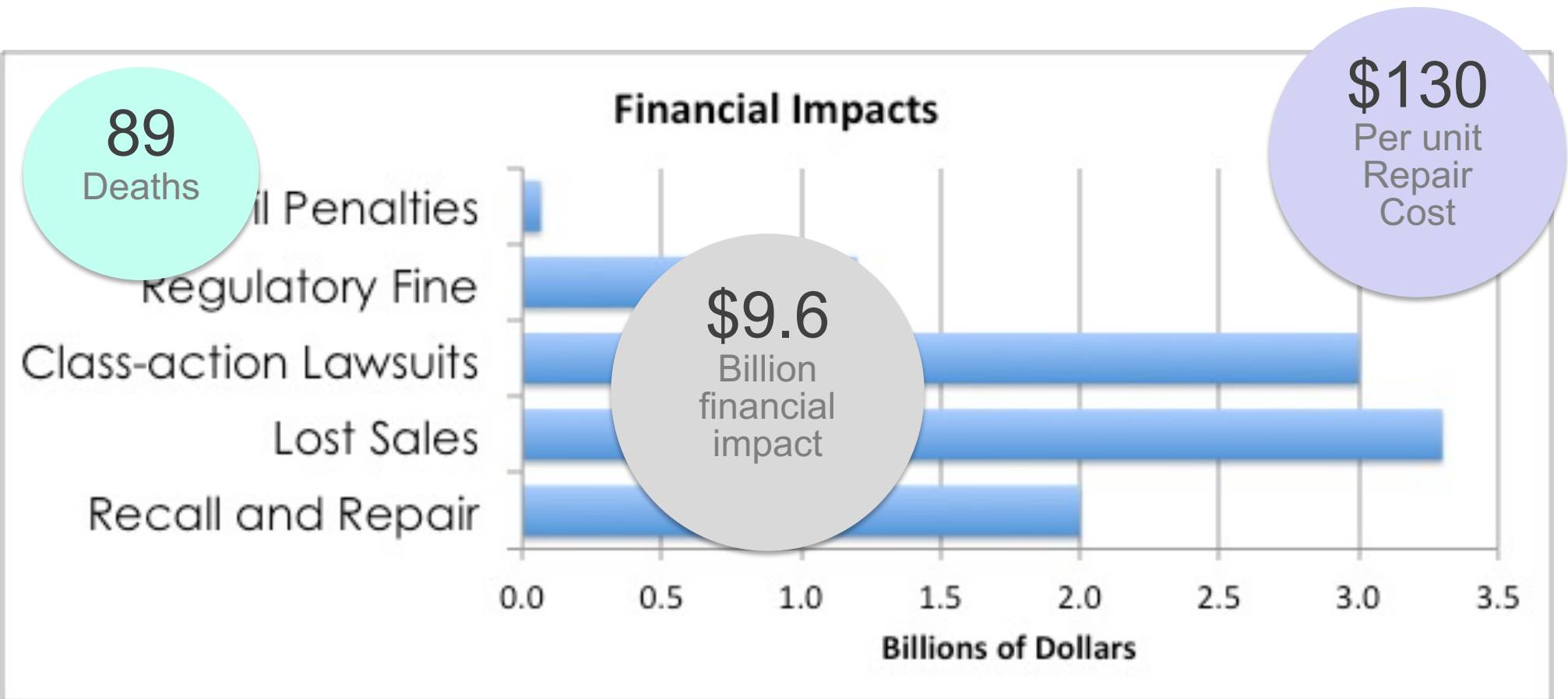


- Toyota concealed defect information from consumers and government officials
- Faulty parts caused sudden, unintended acceleration in several models
- US attorney general, calls Toyota's behavior "shameful" and a "blatant disregard" for the law
- Toyota recalls 8.5 million cars with accelerator defect



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Toyota Accelerator Defect



Toyota Accelerator Defect

- ✓ Protect the balance sheet
 - Normalized deviance
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VW Defeat Device Scandal

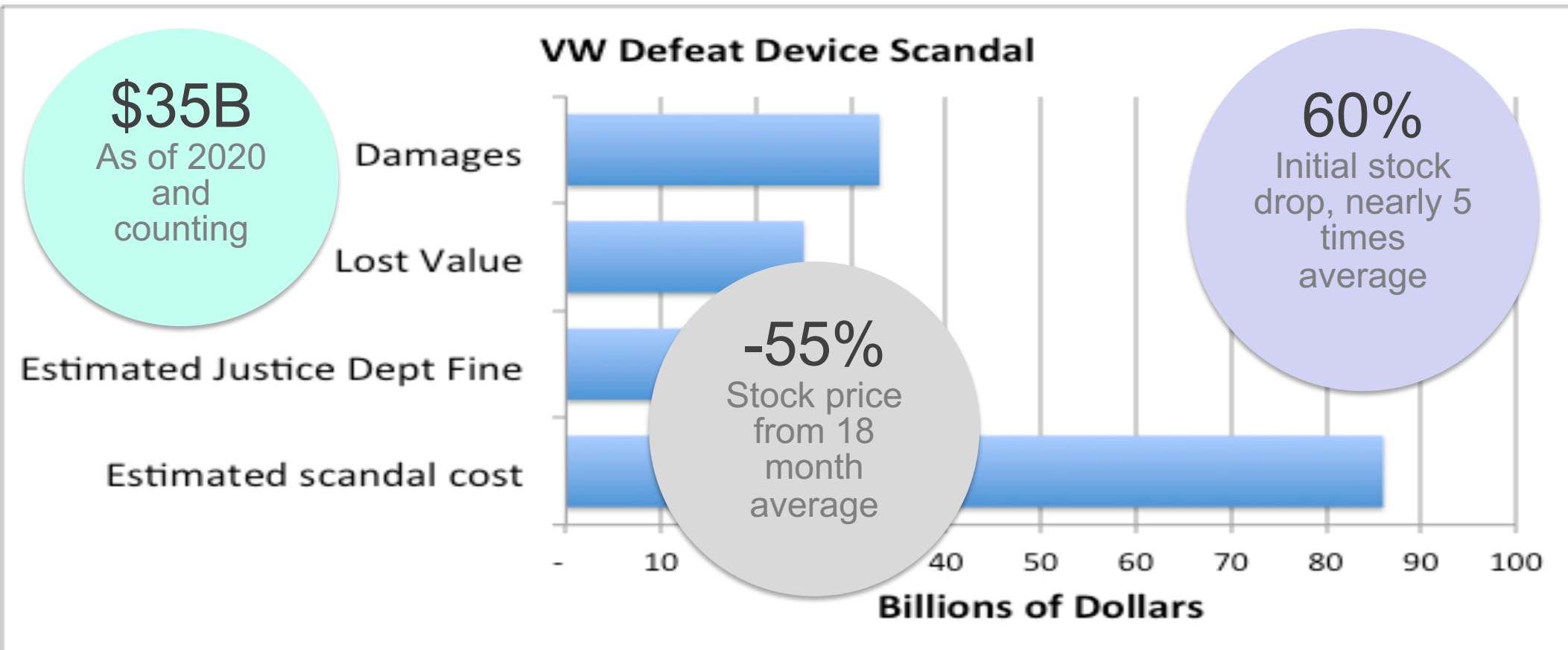


- VW installed software on diesel vehicles that altered emissions during emission testing
- Defeat device software allowed engines to emit pollutants up to 40 times above allowable limits



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VW Defeat Device Scandal



VW Defeat Device Scandal

- ✓ Protect the balance sheet
- TBD Normalized deviance
- ✓ Discourage risk reporting
- Monetizing risk impact
- TBD Qualitative risk impact
- ✓ Ignoring risk impact



What Now?



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What Now?

Change organizational culture

Employ risk scenarios

- Facilitates classification of risk to highlight safety and reputational risk
- Clarifies risk ownership

Re-evaluate organizational structure

Embrace the tenants of High Reliability Organizations (HRO)



Change Organizational Culture



Risk Policy

- Set quantitative appetite thresholds
- Include six risk contexts; schedule, budget, quality, mission, safety, and reputation
- Don't monetize quality, mission, safety, and reputation risk

Properly value risk impact



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Change Organizational Culture



Use six risk contexts

- Schedule risk – days, weeks, months, years
- Budget risk – \$\$
- Quality risk – defect density, warranty claims
- Mission risk – organizational objectives not achieved
- Safety risk – loss of life, lost work days from injury
- Reputation risk – customer satisfaction ratings, focus group results, independent assessment results



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Change Organizational Culture

The University's appetite for risk across its activities is provided in the following statements, and is illustrated diagrammatically.

	Unacceptable to take risks					Higher Willingness to take risks				
	1	2	3	4	5	6	7	8	9	10
Reputation	<	>								
Compliance	<	>								
Financial			<		>					
Research						<				>
Education & Student Experience					<				>	
Knowledge Exchange						<				>
International Development				<			>			
Major change activities		<					>			
Environment and Social Responsibility					<			>		
People and culture		<				>				

University of Edinburgh Risk Policy and Risk Appetite. (20013). Retrieved from <http://www.docs.sasg.ed.ac.uk/GaSP/Governance/RiskManagement/RiskAppetite.pdf>



Change Organizational Culture



Financial – The University aims to maintain its long term financial viability and its overall financial strength. Whilst targets for financial achievement will be higher, the University will aim to manage its financial risk by not breaching the following minimum criteria¹:

It will

- achieve a surplus of a minimum of 2% of gross income over any 3 year period
- operate with a Staff Cost/Total Expenses ratio of less than 60%
- achieve a rate of return of at least 2% above inflation on its endowment investments over a 3 year period
- ensure long term borrowings never exceed 20% of net assets
- ensure its surplus before interest always exceeds 2 times net interest charge
- ensure that at least three months equivalent spend is held cash or cash equivalents or in negotiated bank facilities

University of Edinburgh Risk Policy and Risk Appetite. (20013). Retrieved from <http://www.docs.sasg.ed.ac.uk/GaSP/Governance/RiskManagement/RiskAppetite.pdf>



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Risk Scenarios

A way to conceptualize
risk to aid in the
identification of risk
events

Entity that
generates
the threat

Nature of
threat
event

Risk Scenario

Entity affected
by risk event

Risk Scenario						
Actors	Threat Type		Risk Event		Assets	Time
Internal External	Malicious Accidental External Requirement	Failure Nature Error	Disclosure Interruption Modification Theft Destruction	Ineffective Design Ineffective Execution Rules & Regulations Inappropriate Use	People Org Structure Process Infrastructure Information Applications	Duration Timing Detection Time Lag

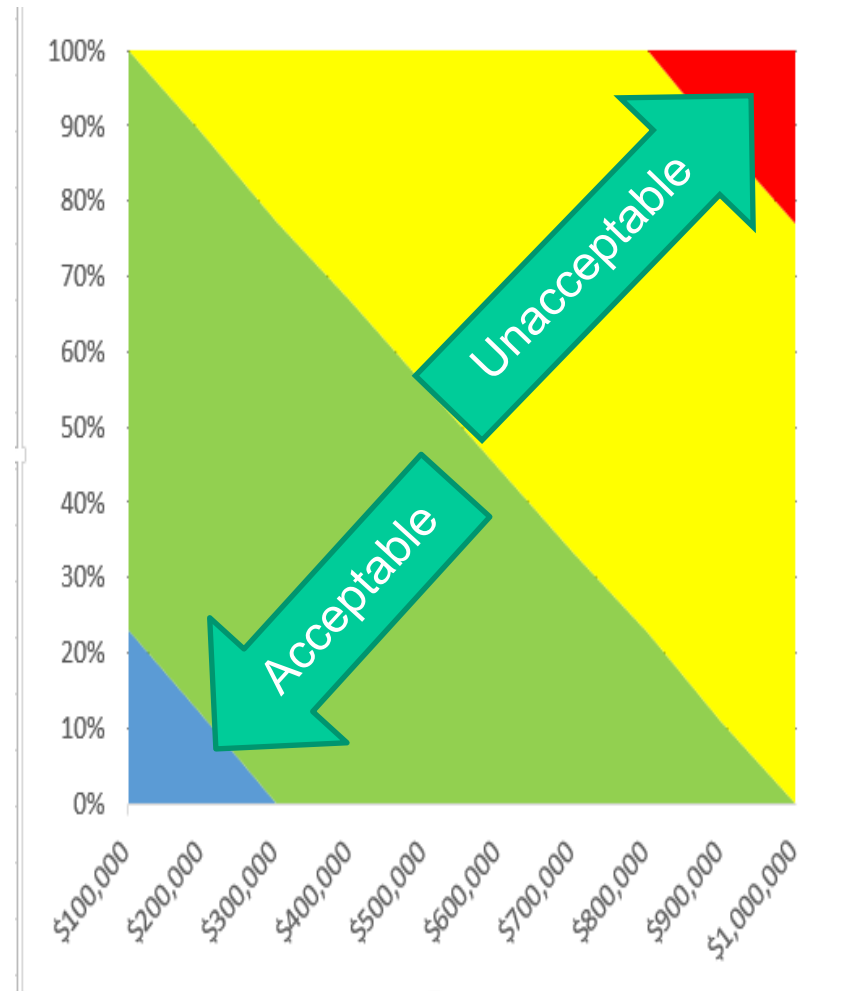


Risk Heat Maps

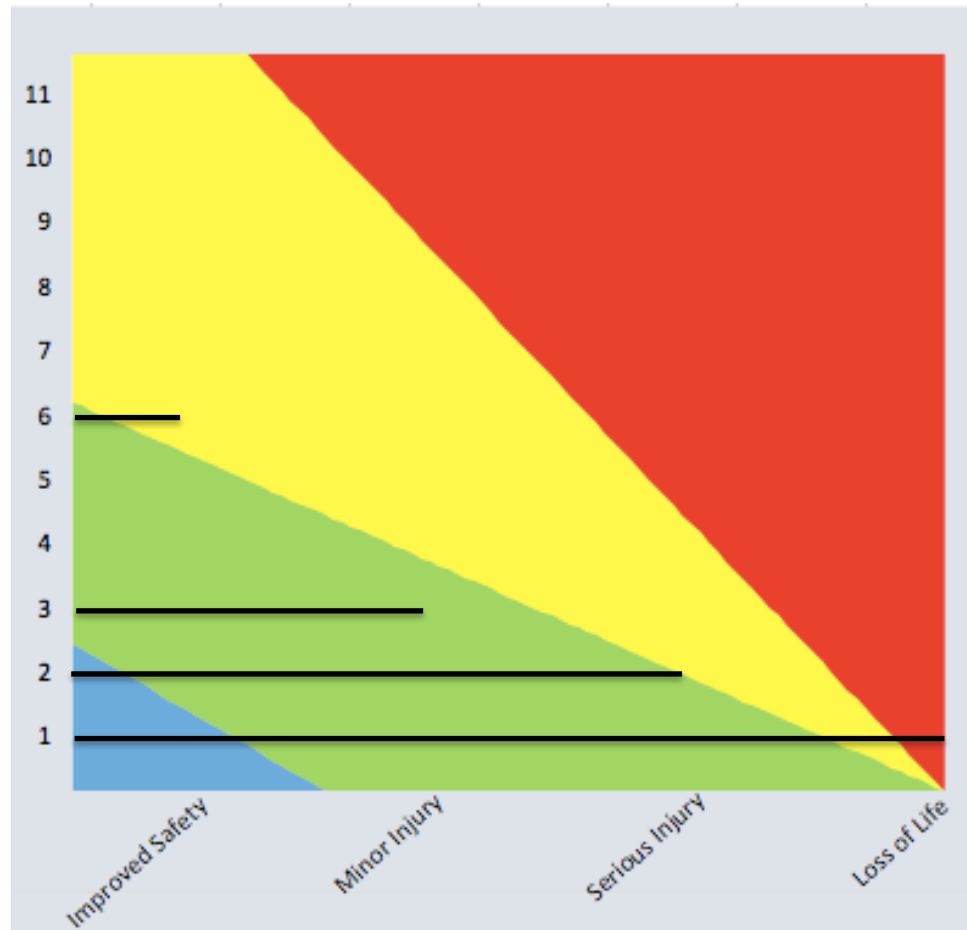
ISACA's COBIT for
Risk is an excellent
guide

Clarifies what
constitutes
acceptable vs
unacceptable risks

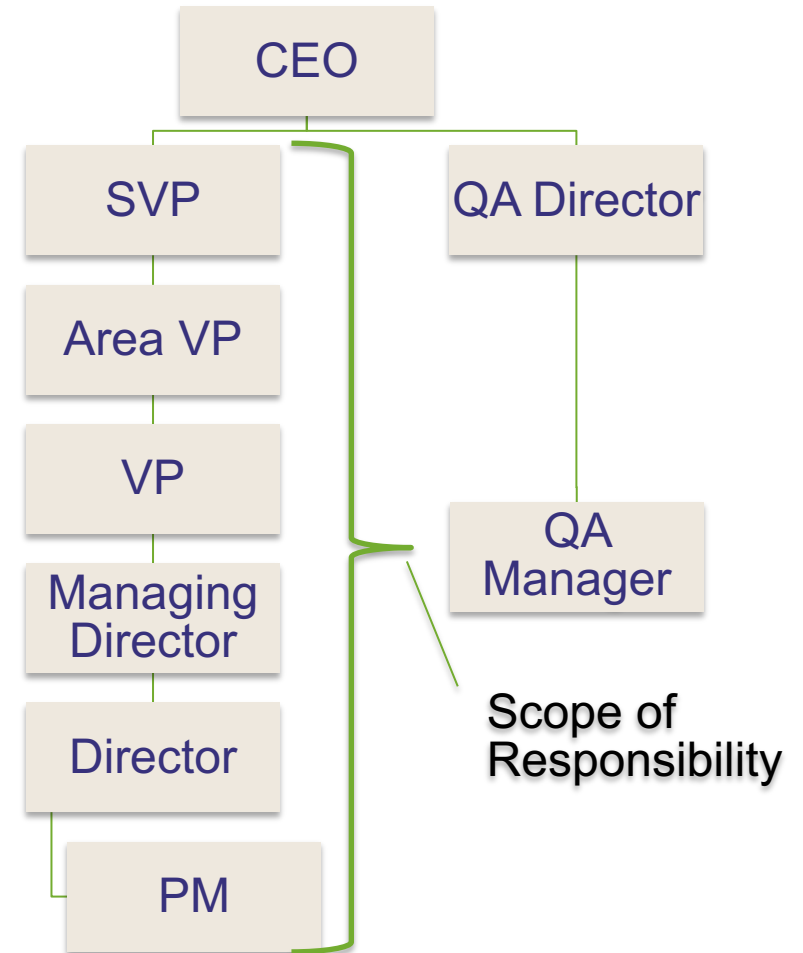
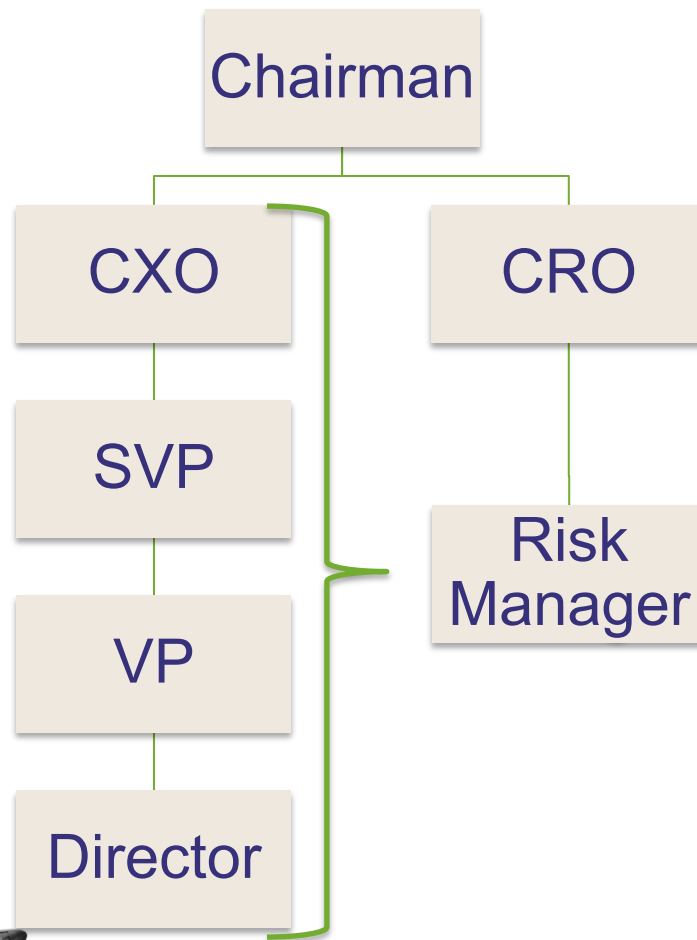
Understand risk
tolerance thresholds



Risk Heat Maps



Re-evaluate Organizational Structure



Re-evaluate Organizational Structure



Risk owner – person who writes the check to cover the impact resulting from a loss event

- Schedule Risk and Safety Risk – COO
- Budget Risk – CFO
- Mission Risk – CEO
- Quality Risk – CQO
- Reputation Risk – Chairman of the Board



High Reliability Organization (HRO)



- Operate in environments where potential for disaster is high
- Very high risk appetite and tolerance
- Top priority is effective performance
- Avoid disasters through collective learning
- Develop a culture of reliability
- Extensive process auditing exists
- Reward system that rewards risk-mitigating behavior
- Quality standards that exceed referent standards
- Correctly assess risk impact
- Strong command and control system that includes migrating decision making, redundancy, decision makers have “big picture” perspective, and formal rules and procedures



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Conclusion

- Is protecting the balance sheet enough?
- Establish and foster a risk aware culture
- Improper impact valuation can lead to astronomical financial impacts
 - Toyota, VW, Takata
- Normalized deviance can be catastrophic
 - GM, Columbia Shuttle, Deepwater Horizon
- Consider all risk contexts, not just financial risk
- Embrace tenants of HROs
 - Effectiveness, reliability, collective learning, and proper risk valuation



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Social Q&A for ISACA Maryland Chapter Virtual Conference



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Thank You!

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