Cyber Security Overview

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BRYCE
space and technology

"Software is eating the world."

Marc Andreessen

Cyber risk is a defining challenge of our age

Cyber Risk Complexity

- Information system complexity and reliance

- Increasing skills required to write 'safe' software

- Accelerating value of corporate data

- Cyber warfare

- Insider risk: maliciousness and incompetence

- Adaptive, sentient threat

- Regulation – potentially huge fines

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Cyber risk is a top concern for corporations and government agencies

Cyber Risk Consequences

- Annual cost of breaches estimated at $450+ billion*

- Cyber crime extracts between 15% and 20% of the value created by the internet*

- Allianz's #3 business risk for 2016 and 2017**

- Average cost of breach: $ 4m^

- Average cost per lost or stolen record: $158

- Increase in total breach cost since 2013: 29%

*PwC **Alianz Risk Barometer ^Ponemon Institute

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Cyber risk framework (NIST)

Table 1: Function and Category Unique Identifiers

Function Unique Identifier	Function	Category Unique Identifier	Category
ID	Identify	ID.AM	Asset Management
		ID.BE	Business Environment
		ID.GV	Governance
		ID.RA	Risk Assessment
		ID.RM	Risk Management Strategy
PR	Protect	PR.AC	Access Control
		PR.AT	Awareness and Training
		PR.DS	Data Security
		PR.IP	Information Protection Processes and Procedures
		PR.MA	Maintenance
		PR.PT	Protective Technology
DE	Detect	DE.AE	Anomalies and Events
		DE.CM	Security Continuous Monitoring
		DE.DP	Detection Processes
RS	Respond	RS.RP	Response Planning
		RS.CO	Communications
		RS.AN	Analysis
		RS.MI	Mitigation
		RS.IM	Improvements
RC	Recover	RC.RP	Recovery Planning
		RC.IM	Improvements
		RC.CO	Communications

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Cyber risk management

- Cyber Assessment
- Cyber Playbooks
- Cyber Exercises
- Cyber Crisis Response
- Cyber Business Development Planning

- Technology Strategy
- Capture Strategy
- Technology Sales Support
- Cyber Security Training
- Agency-compliant IT Security Plans

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For more information

This presentation was prepared by Bryce Space and Technology.

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