

An Inside Look at Risk Management in a Large Academic & Research Setting

Understanding How Complex Risks Are
Identified, Assessed, and Mitigated

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The Nature of Risk in Higher Education

- Universities are small cities—each with unique challenges.
- Risks span student life, research, IT, facilities, and global programs.
- Includes strategic, operational, compliance, and hazard categories.

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The Risk Management Framework

- Identify → Assess → Mitigate → Monitor → Communicate

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Identifying Risks

- Sources: incident reports, audits, feedback, insurance claims.
- Early detection through open communication.
- Example: a leaky roof or outdated lab system discovered during inspection.

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Assessing Risks

- Evaluate likelihood vs. severity/impact.
- Factors: safety, financial, reputational, operational.
- Data and experience guide prioritization.

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Risk assessment matrix

		Likelihood				
		Very unlikely to happen	Unlikely to happen	Possibly could happen	Likely to happen	Very likely to happen
		Moderate	Moderate	High	Critical	Critical
Impact	Catastrophic consequences	Moderate	Moderate	High	Critical	Critical
	Significant consequences	Low	Moderate	Moderate	High	Critical
	Moderate consequences	Low	Moderate	Moderate	Moderate	High
	Low consequences	Very Low	Low	Moderate	Moderate	Moderate
	Negligible consequences	Very Low	Very Low	Low	Low	Moderate

BigPicture

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Mitigating Risks

- Engineering, policy, training, and insurance strategies.
- Collaboration across departments is key.
- Example: retrofitting labs or developing contractor protocols.

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Research Risk Focus

- Research introduces biosafety, data, and compliance issues.
- Partnerships with EHS (Environmental Health and Safety) and Sponsored Programs ensure alignment.
- Export control, data privacy, and lab safety are ongoing priorities.

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Crisis and Incident Response

- Preparedness through continuity and emergency plans.
- Coordination across police, fire, IT, and leadership.
- Post-incident reviews drive improvement.

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Communication and Culture

- Transparency and shared ownership of risk.
- Reporting builds trust and proactive engagement.
- Culture of 'see something, say something.'

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Looking Ahead

- Emerging risks: AI ethics, cybersecurity, climate change.
- The goal is proactive—not reactive—management.
- Risk management enables progress, not fear.

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Questions & Discussion

Questions?

Story sharing?

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Top 3 Immerging Risks in Higher Ed

- AI Disruption & Academic Misuse
- Cybersecurity & Ransomware
- Enrollment & Financial Sustainability

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AI Risk

- What Is The Concern:

- Rapid adoption, unregulated use, severe academic & compliance impacts

- Level Of Concern:

- High but Manageable

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What We Have Done to Manage It

- ❑ Best Practices
 - ❑ Create a centralized AI governance structure
 - ❑ Build a university-approved safe AI platform
 - ❑ Adopt clear AI policies
 - ❑ Train campus leaders and faculty
 - ❑ Establish research-specific controls

- ❑ Purdue leads the way:
 - ❑ Director of Artificial Intelligence (AI) and Automation at Purdue: Kenny Wilson
 - ❑ Purdue AI policy website: <https://it.purdue.edu/ai/ai-review-governance/>

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Cybersecurity & Ransomware

- What Is The Concern:
 - ❑ Frequency and severity of ransomware attacks against universities continue to rise sharply

- Level Of Concern:
 - ❑ High but manageable

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What We Have Done to Manage It

- Centralize Identity & Access Management (IAM)
- Segment and Harden the Network
- Protect Research & High-Value Data
- Backup Strategy Resistant to Ransomware
- Email Security & Phishing Defense
- Endpoint Detection & Response (EDR)
- Incident Response & Crisis Preparedness
- Least-Privilege Administrative Access

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