



NATIONAL ASSOCIATION OF
INSURANCE COMMISSIONERS

Cyber Risk and Assessment

An Insurance Industry
and Market Perspective

**NAIC 2023
FALL NATIONAL MEETING
SUNDAY, DECEMBER 3RD
2:00 PM – 3:30 PM (ET)**



NAIC | CENTER FOR INSURANCE POLICY AND RESEARCH



Cyber Risk and Assessment

An Insurance Industry and Market Perspective

December 3, 2023

2:00 - 3:30 pm (ET)

Overview

To underwrite risks, insurers collect a multitude of policyholder personally identifiable information (PII). As this PII has been entrusted to insurers by the insured, it is their responsibility to keep this PII safe and secure. Thus, in a digital world with dynamic cyber-related threats, insurance company cybersecurity hygiene is a critical regulatory issue. We will provide a broad assessment of industry cybersecurity loss events over the past decade and discuss ongoing NAIC initiatives as well as general cybersecurity best practices aimed at curbing the frequency and impact of such loss events. Moreover, having appropriate cyber insurance in place is one tool that insurance companies can employ for their own cybersecurity risk management. Suitable modeling of cyber risk underpins the development of a robust cyber insurance marketplace for not only insurers but commercial entities at large. We will also discuss the cyber risk modeling landscape, how these tools are being employed from an underwriting perspective, and where this modeling field is headed to allow for further cyber insurance marketplace advancement.

Learning Objectives

- Provide a historical overview and key learnings of insurance industry cybersecurity loss events.
- Discuss the work underway by state departments of insurance and the NAIC, in relation to prescribed best practices, to enforce proper insurance company cybersecurity hygiene.
- Understand the modeling of cyber risks and challenges associated with this.
- Begin to assess the employment of cyber models for more widespread cyber insurance marketplace development.



Plan For Event

1. Broad assessment of insurance industry cybersecurity loss events over the past decade *(20 minutes)*
 - **Jeff Czajkowski**
Director, Center for Insurance Policy and Research (NAIC)
2. Discuss insurance industry loss events in wider context as well as ongoing NAIC initiatives and best practices aimed at curbing the frequency and impact of such cybersecurity loss events *(30 minutes)*
 - **Cynthia Amann**
Missouri Department of Commerce and Insurance
 - **Jim Blinn**
Zywave
3. Cyber modeling landscape and application *(30 minutes)*
 - **Shaveta Gupta**
Catastrophe Modeling Center of Excellence (NAIC)
 - **Rebecca Bole**
CyberCube





JEFFREY CZAJKOWSKI

CIPR Director

Dr. Jeffrey Czajkowski serves as the Director of the Center for Insurance Policy and Research (CIPR) for the National Association of Insurance Commissioners (NAIC). The CIPR provides research and education to drive discussion and advance thought leadership as well as action on current and emerging insurance issues amongst insurance regulators, policymakers, industry, and academics. This is accomplished through CIPR's events, research publications, newsletter and website, the Journal of Insurance Regulation, and its extensive NAIC research library holdings.

Prior to joining the CIPR, he served as the Managing Director for the Wharton Risk Management and Decision Processes Center at the University of Pennsylvania, conducting research on various economic and risk-related issues of natural disasters and resilience, as well as on issues of environmental economics. His work has been published in leading risk management, insurance, natural hazards, and environmental economics journals. A significant amount of his research involves working collaboratively in cross-disciplinary research teams and applying research findings through various interactions with top policymakers and senior executives in the insurance industry. This has included serving on two National Academy of Sciences committees, being an academic advisory board member for the World Economic Forum's Global Risk Report, a member of the Federal Alliance for Safe Homes (FLASH) Resilience Policy Council, and a fellow for the Willis Research Network.

He holds a B.S. from Carnegie Mellon University, an M.S. in environmental and urban systems from Florida International University, and a Ph.D. in economics from Florida International University.

Preceding graduate school, he worked in New York City as a research associate for Coopers & Lybrand Consulting and was a vice-president for JP Morgan. He has taught economic courses for over 15 years at a number of universities and was an adjunct assistant research professor at the International Hurricane Research Center (IHRC) at FIU.



CYNTHIA AMANN

Missouri Department of Commerce and Insurance

In 2017, Cynthia returned to the Department of Insurance (DOI) in a role as the NAIC Executive Liaison and Marketplace Coordinator. Working under the Director and Deputy Director/General Counsel, they engage in various department-wide initiatives, focusing on streamlining and improving processes across departments within the DOI. Her main responsibilities include involvement in NAIC committees, working groups, and task forces, overseeing compliance with NAIC's Strategic Plan, managing continuing education, coordinating cybersecurity examinations, and contributing to market regulation reforms.

Additionally, Cynthia participates in the Governor's Organizational Health Initiative (OHI) as a Department Co-Chair, focusing on innovation and technological improvements. They evaluate and enhance examination procedures, monitor audits, and refine data analytics for better marketplace understanding. She also engages in research, policy development, and special projects related to the insurance industry. She aims to establish an inter-disciplinary division across departments within the DOI for more efficient responses to marketplace actions, utilizing existing data and staying informed about industry developments.

Cynthia's extensive background includes years of service as a Compliance Auditor at the State of Missouri Insurance Department, where she oversaw examinations, developed protocols, provided legal support, and contributed to the implementation of market analysis concepts. She has received awards for her contributions to the regulatory field and have been active in various industry committees and organizations. Throughout her career, she has maintained a high level of expertise in insurance, state regulation, and national standards, particularly focusing on market analysis, examination procedures, cyber security, and catastrophe response planning.



JAMES BLINN

Vice President, Client Solutions, Zywave

Jim brings a diverse background based on over forty years in the commercial property casualty insurance industry. Jim is responsible for providing technical pre- and post-sale services surrounding the products that Zywave offers to insurers, brokers and industry service providers. This includes the use of our proprietary loss datasets in modeling and risk analysis applications. Based on his constant interaction with users, Jim provides guidance to the team responsible for the curation of our content of our loss data. Through this work, Advisen has collected a substantial data set of cyber, D&O, casualty and other forms of loss. He is a graduate of Yale College and received an MBA from the Wharton School of the University of Pennsylvania.



SHAVETA GUPTA

Catastrophe Modeling Center of Excellence (NAIC)

Shaveta Gupta serves as the Cat Risk and Modeling Advisor at Catastrophe Modeling Center of Excellence (Cat COE) for the National Association of Insurance Commissioners (NAIC).

Shaveta has over 15 years of experience in the field of Catastrophe Modeling and in-depth knowledge of operationalizing catastrophe models. Prior to joining the CAT COE, she held various leadership positions within the (re) insurance industry. Most notably, Director - CAT Reinsurance Analytics working for AON and as Head of Catastrophe Modeling (Americas) for Zurich Insurance Group.

She holds a degree of Applied Masters in Statistics from University of Michigan, Ann Arbor. In addition, she holds number of industry designations in her area of expertise that includes Certified Property and Casualty Underwriter (The Institutes) and Certified CAT Modeler (Verisk Extreme Event Solutions, formerly known as AIR Worldwide), Certified Catastrophe Risk Management Professional (from International Society of Catastrophe Managers).



REBECCA BOLE

Head of Industry Engagement, CyberCube

Rebecca is a member of the leadership team at CyberCube and responsible for setting and executing strategy for stakeholder engagement on cyber risk and insurance. She is in charge of the marketing and outreach strategy for the company, engaging with key stakeholders in the cyber security, risk, governance and insurance communities.


Rebecca has almost 30 years experience in the insurance sector, with leadership positions in insurance underwriting at Lloyd's and in the insurance media and data & analytics sectors in London and New York.

She is an experienced business leader with a strong focus on stakeholder engagement. With a deep understanding of the insurance sector and risk topics, she has good visibility into bleeding-edge risk trends including cyber, technology, regulation, globalisation and data & analytics.

Prior to joining CyberCube, Rebecca was EVP and Editor-in-Chief at US data and media company, Advisen. Running a US-based team, Rebecca delivered growth and innovation in complex marketplaces, through news, conferences and content on risk topics including cyber, management liability, property and casualty insurance.

She also spent five years at London-based publisher, Insider Publishing, leading the global editorial team and successfully launching new publications for the group.

Rebecca spent the first ten years of her career as a senior underwriter at various syndicates at Lloyd's, where she insured portfolios of financial institutions against professional and management liability and crime risks. She is qualified as an Associate of the Chartered Insurance Institute.



The National Association of Insurance Commissioners (NAIC) is the U.S. standard-setting and regulatory support organization created and governed by the chief insurance regulators from the 50 states, the District of Columbia and five U.S. territories. Through the NAIC, state insurance regulators establish standards and best practices, conduct peer review, and coordinate their regulatory oversight. NAIC staff supports these efforts and represents the collective views of state regulators domestically and internationally. NAIC members, together with the central resources of the NAIC, form the national system of state-based insurance regulation in the U.S.

For more information, visit www.naic.org.