

Stay ahead of adversaries

Quantifying cyber risk



OVERVIEW

See clearly the financial impact of your cyber risk decisions.

When confronting a high-velocity, evolving threat like cyber, you need a solution that can stay ahead of the curve. Complex Risk Analysis (CRisALIS) is an end-to-end, forward-thinking cyber risk quantification and decision solution that allows you to analyze risk data, understand trends in the threat, and make business decisions based on financial metrics. Unlike legacy solutions, CRisALIS addresses the shortcomings associated with frequency-severity and relying on historical loss data for modeling.

Beware solutions using an outdated approach for modeling cyber:

- Frequency-severity modeling treats frequency and severity as independent variables, which is an inappropriate assumption for an adversarial risk like cyber. In order to defeat cyber controls and gain access to systems, data, and applications, bad actors may align the frequency and severity of attacks
- Models that rely on historical loss data cannot account for the new and innovative cyber threats corporations would be expected to face

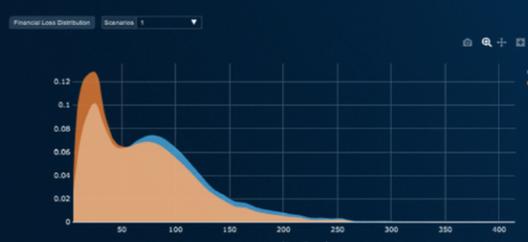
CRisALIS solves the problems associated with outdated modeling:

- Driven by operational data and external threat information, accounts for the interconnected mitigation decisions that a company has made as well as how actual cyberattacks propagate to create losses
- Provides decision makers and risk managers with a more accurate understanding of current vulnerabilities—as well as actionable recommendations for mitigation decisions and sophisticated predictions about potential future losses

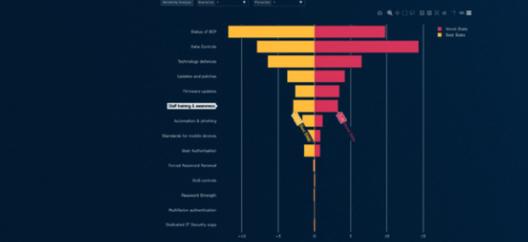
CRISALIS

A look inside

All of the tools and visualizations below are presented in a comprehensive dashboard that is fully customizable:



Financial Loss Distribution
Shows potential loss in financial terms, allowing firms to understand their exposure and determine their risk appetite.



Understanding the magnitude of the risk drivers and control effectiveness
enabling firms to prioritize actions in their risk mitigation strategy and plans.



Cyber Data with legacy tools
The “External Risk Indicators” module offers real-time threat and risk information, enabling firms to analyze and identify cyber risk trends, patterns and shifts.



Advanced information metrics
show previously undetected relationships between sets of data. This allows for modeling with the most impactful data and creates additional risk warning signs.



Executives and risk professionals
can adjust the inputs to run different scenarios to test the impact of potential mitigation strategies.



BENEFITS

How can CRisALIS help you?

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Clarified complexity
Translates cyber risk in financial terms that are understood by boards and decision makers



Bolstered decision making
Justifies a cyber mitigation plan and spending on cyber controls
- 

Future facing
Addresses the shortcomings of frequency-severity and reliance on historical loss data



Strategic acuity
Illuminates cyber blind spots so risk managers can make more informed risk decisions
- 

Prioritized mitigation
Identifies which cyber controls are most effective at mitigating loss, creating the ability “test” and business case mitigation strategies



Regulatory reinforcement
Demonstrates to the regulator that the firm is proactive in mitigating cyber risk

FEATURES

Key features

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Improved modeling
Addresses the shortcomings of frequency-severity and historical loss modeling



Sophisticated assessments
Risk indication capabilities using data analysis tools that look for anomalies in data sets
- 

Tailored dashboards
Interactive reporting dashboards that quantify cyber risk and allow for what-if analysis



Relevant insights
Ability to identify relevant networks and communities in data sets
- 

Impactful analysis
Ability to separate signal from noise to identify the most impactful data for analysis



Forward-looking protection
Provide forward threat detection capabilities using AI and unstructured data

About Milliman

Milliman is a leading consultant to the insurance industry, advising most of the world's largest insurers.

We combine more than 70 years of risk expertise with advanced data analytics and market-leading technology solutions to help our clients:

- navigate increasingly volatile markets;
- drive product innovation and efficiency;
- protect assets from complex and interconnected risks;
- create groundbreaking solutions to some of society's greatest challenges.

With offices across the globe, we have in-depth knowledge of the local regulations in every market we serve, and we actively invest in research to keep our clients one step ahead in a rapidly changing world.



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Every day, in countries across the globe, Milliman works with clients to improve healthcare systems, manage emerging risks, and advance financial security, so millions of people can live for today and plan for tomorrow with confidence.

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