MARSH

MARSH'S CYBER-PRIVACY EVENT MODEL: ANALYTICS FOR CYBER DECISION-MAKING

The aftermath of a privacy breach or a cyber attack may result in reputational and financial harm to an organization. Despite the fact that no one can predict when a cyber-related event will occur, Marsh's proprietary Cyber IDEAL (Identify Damages, Evaluate, and Assess Limits) Model assists risk managers and other executives in quantifying the likelihood that their organization will experience a breach and its potential severity. Through customized analysis for different business sectors and revenue bands, the Cyber IDEAL Model provides insights to facilitate insurance-purchasing decisions. While there are different approaches to cybersecurity, our Marsh Global Analytics and FINPRO Practice developed the model to assist our clients in determining the most appropriate insurance limits and retention.

HOW IT WORKS

The Cyber IDEAL Model examines the likelihood of an unauthorized disclosure and estimates the potential cost of a data-breach. Using global historical breach information, the Model determines the frequency and severity of cyber incidents using one-year probability of a data-breach event. Data sources include Marsh's proprietary cyber database, Privacy Rights Clearinghouse's Chronology of Data Breaches, and Advisen's online large-loss database, MSCAd.

The probability of a data-breach event is correlated with an organization's industry and revenue size. Organizations with higher revenue tend to face a higher probability of a data breach due to their size and the perception that they have more records, and thus more targets. Generally, if an organization has had prior data-breach events, there is a higher likelihood it will have another. Organizations with less robust data security may also face an increased risk of a breach.

Who it's for

- Risk managers and others involved in the day-to-day purchasing of insurance.

- Executives who need analytical data to support their defensive cyber decision-making with their board of directors.

- Companies that want to improve their analytical modelling of cyber risks.

What you get

- Data-driven support for cyber decision-making.

- Ability to judge whether a data breach may exceed the limit of liability under a cyber liability policy.

- A range of potential outcomes from a data-breach event, and a breakdown of potential costs for each outcome.

- Industry-specific analytical cyber data.

SOLUTIONS…DEFINED, DESIGNED, AND DELIVERED.

MARSH & McLENNAN COMPANIES

CYBER IDEAL: A RANGE OF POTENTIAL SAMPLE INDUSTRY PRIVACY EVENT OUTCOMES

EVENT TYPE		PERCENTILE	NUMBER OF AFFECTED RECORDS	TOTAL COST PER EVENT
Mean		-	779,741	$13,454,865
	1 in 2 Events	50%	5,186	$340,496
	1 in 4 Events	75%	73, 772	$1,597,941
SEVERITY	1 in 5 Events	80%	143,467	$2,657,613
	1 in 10 Events	90%	577,148	$10,914,713
	1 in 20 Events	95%	1,896,412	$32,442,690
▼	1 in 100 Events	99%	19,976,225	$315,257,617

Note: Total cost per event includes both variable and fixed costs.

CYBER INSURANCE CONSIDERATIONS

Knowing what kinds of insurance solutions exist in the marketplace is half the battle in providing an effective corporate defense against cyber-attacks. It is equally important to figure out how these risk transfer solutions align themselves to an organization's coverage needs.

Whether an organization is evaluating the costs of legal defense and potential third-party liabilities, or just simply looking for tools to reduce the uncertainty surrounding a data breach, the Cyber IDEAL Model can help. Factors to consider include:

- Is there a written cybersecurity risk management strategy?
- Does the insurance policy exclude data breaches?
- Does it provide coverage for derivative shareholder claims?
- Are the current policy limits appropriate for its risk profile?
- What are the most likely external and internal threats?

WHY CHOOSE CYBER IDEAL

As hacker sophistication increases, corporate executives must address the risk. No organization is ever fully prepared for such attacks, but analytical tools such as Marsh's Cyber IDEAL Model can provide the decision-making support to corporate executives. Cyber IDEAL Model provides an insightful analysis of cyber-privacy related events by industry.

For many companies, the Model shows that their cyber exposure could far eclipse their average insurance coverage. Having objective analytical cyber privacy event data can help risk managers and other executives determine the right risk management solutions specific to their organization's cyber exposure and size.

WHY MARSH?

Marsh's team of cyber and risk management colleagues provides a holistic combination of hands-on practical know-how and claims expertise. Their industry and risk insights bring a focused approach to reducing an organization's total cost of risk.

MARSH FINPRO PRACTICE

Marsh's FINPRO Practice is a leading risk management advisor and thought leader in the network and security risk space. From the creation of the first "cyber" policy forms to helping insurers develop the new privacy coverage, Marsh continues to move and shape the market on behalf of our clients. As part of our service offerings, Marsh is able to assist our clients in evaluating their network and security risks through coverage gap analyses and risk assessments.

MARSH GLOBAL ANALYTICS

Marsh Global Analytics provides a wealth of information that can be tailored to clients' needs. The team focuses on risk economics, Cyber IDEAL Modelling, Catastrophe Modelling, general benchmarking and analytical services, and providing global sales support.

CONTACT:

DOUGLAS URE
Managing Director
+65 6922 8233
douglas.ure@marsh.com

KEGAN CHAN
Vice President
+852 2301 7205
kegan.kc.chan@marsh.com