THE EVOLVING RISKS OF CYBER AND AI

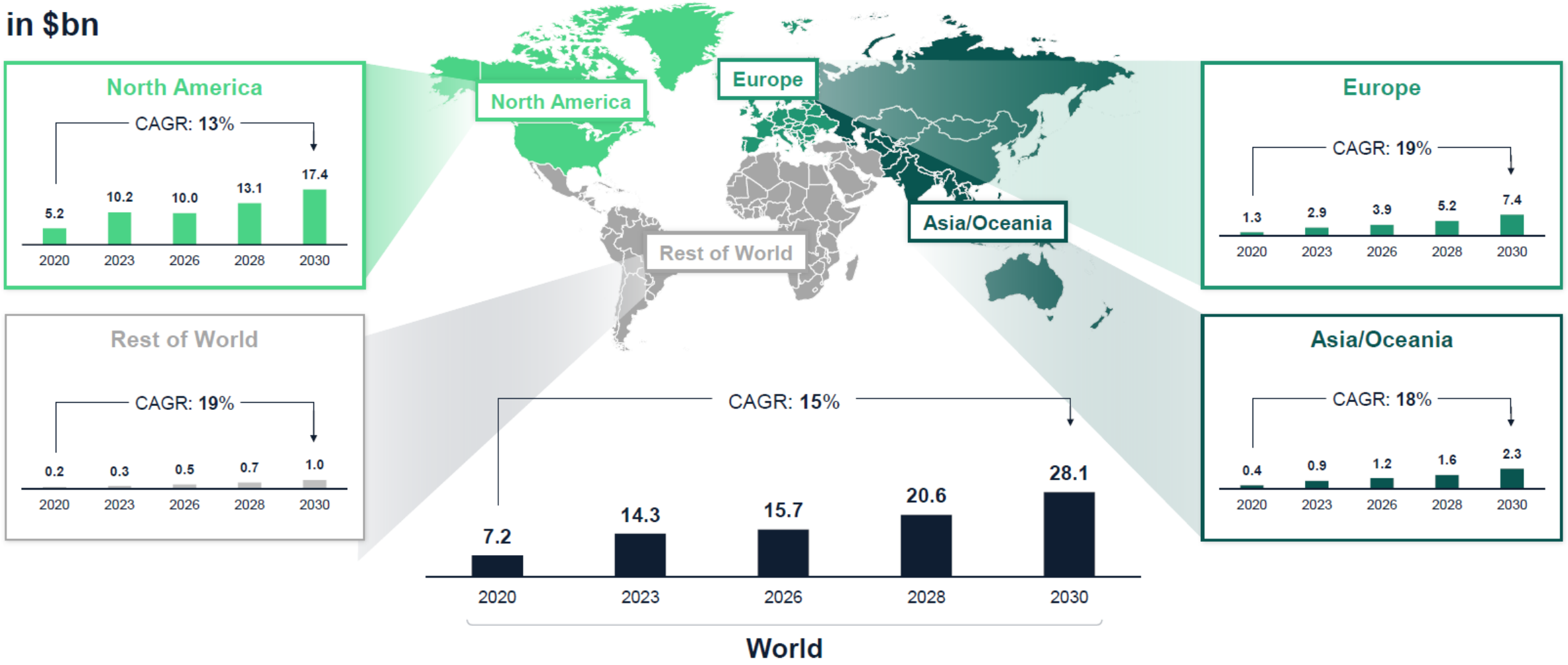
Not Every Storm Comes from the Sea

Mamoon Ali | Toronto | November 2026

CYBER MARKET AND OPPORTUNITY OVERVIEW

Global Cyber Insurance Market

in $bn



Source: Munich Re

Cyber as a Percentage of P&C Premium



- Cyber continues to be one of the biggest growth opportunities
- Growing awareness amongst decision makers, yet penetration is still low

Source: Munich Re & HDI Estimates

TRADITIONAL CYBER RISKS

MARINE RISK IS BECOMING DIGITAL RISK, AND DIGITAL EVENTS CAN NOW PRODUCE TRADITIONAL MARINE LOSSES

The Modern Vessel is a Floating Computer Network



Bridge & navigation

ECDIS, AIS, radar, GPS/GNSS

Machinery & power

Propulsion, power management, ballast

Cargo systems

Reefer monitoring, loading and stability

Connectivity

Satellite, remote maintenance, crew Wi-Fi

Cyber risk has crossed the digital–physical divide

01

INTRUSION

Compromised credentials, vendor access or software update

›

02

LOSS OF CONTROL

Critical IT or OT becomes unavailable or unreliable

›

03

PHYSICAL EVENT

Collision, grounding, machinery or cargo-control failure

›

04

INSURED LOSS

The event may be digital. The loss can be physical, operational and financial.

What happens when some future “machinery failure” event originates in software rather than metal?

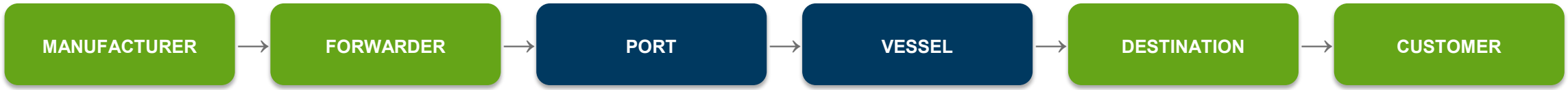
One ship is not what keeps underwriters awake

The systemic scenario is one technology provider affecting an entire fleet



1. Compromised update
2. Hundreds of vessels affected
3. Sailings suspended
4. Ports congested
5. BI and CBI propagate

Supply Chain



- Booking platforms
- Freight management
- Customs Systems

- Port Systems
- Terminal OS
- Vessel Systems

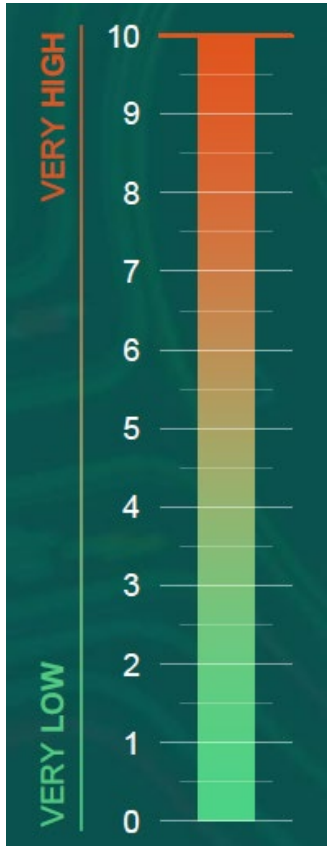
- GPS/ GNSS
- Cloud Providers
- Software Vendors

Cyber concentration isn't necessarily geographic. It can be technological.

Marine is uniquely vulnerable to aggregation. How many insureds could fail together because they use the same technology?

Cyber Insurance Impact

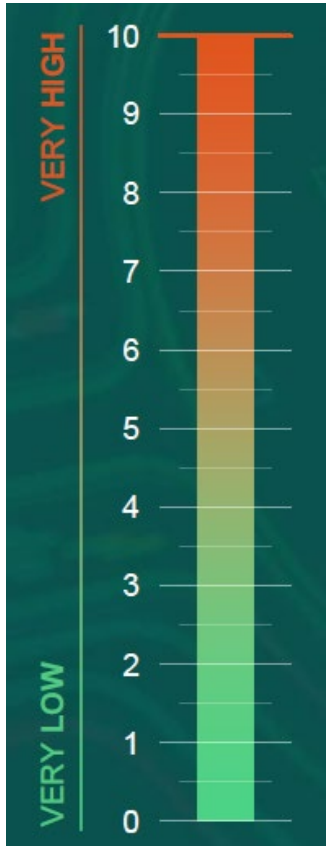
Ransomware/ Data Breach



Ransomware will continue to be the largest loss driver.

We are seeing the focus shift from larger to smaller organizations

Supply Chain

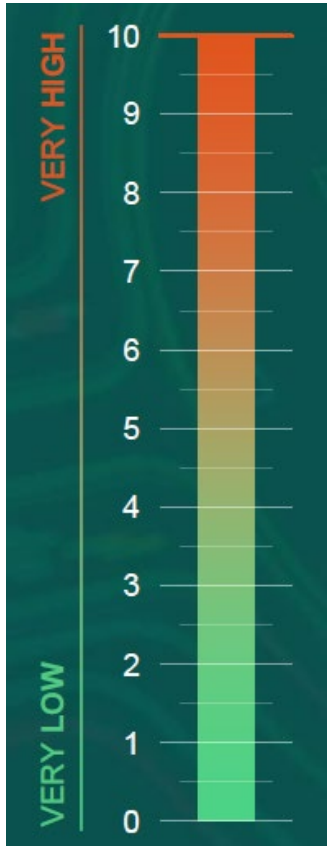


Systemic dependencies are growing.

Limitations exist with managing 3rd party risk management. How do you effectively maintain visibility, assess security and risk concentration?

Cyber Insurance Impact

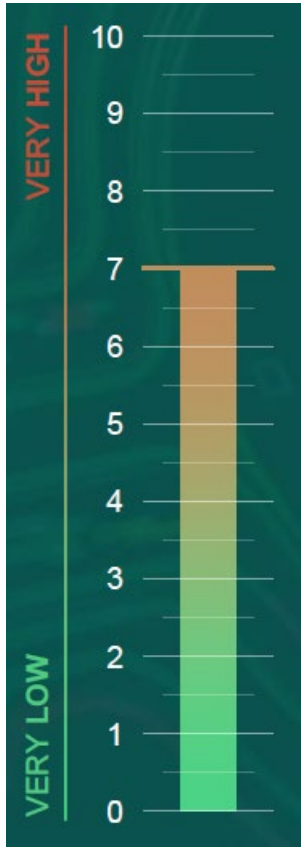
Cybercrime



Quick progress and tech points to a more complex and damaging cybercrime landscape

Fraud-as-a-Service / Ransomware-as-a-Service operations are on the rise

Geopolitics



Sophistication of actors is increasing.

Geopolitical tensions continue to reshape the cyber battlefield

War Exclusions are present on policies, but proving it has been historically challenging

The most dangerous threat actor is the one who wants nothing from you

EMERGENCE OF AI

Definitions

- Artificial Intelligence: Software that can perform tasks normally requiring human intelligence (understanding language, recognizing patters, etc)

- Agentic AI: It doesn’t just respond to a prompt. It goes and does the job for you.

- Example. Insurance Claims Scenario
  - AI (CoPilot): You ask it to summarize a claim file. You get a summary.
  - Agentic AI: Receives claim, pulls policy, checks coverage, flags missing docs, and drafts a decision for your review.

Critical Points to Note with Respect to AI

- AI **has not** created a new threat vertical (yet)

- AI has materially changed:
  - the **speed and economics** of cyber crime
  - the **typical profile** of a threat actor

- The implications of real-world mistakes/ errors are **not known yet**

AI changes the economics of cybercrime

Faster reconnaissance, credible impersonation and attacks at scale

1 CONVINCE

Natural language, context and translation

2 IMPERSONATE

Deepfake voice and video

3 DISCOVER

Automated research and vulnerability identification

4 SCALE

Personalized phishing at industrial volume



You may not need to hack the entity

01

RESEARCH

Executive, vessel, broker and vendor relationships

02

DEEPFAKE

Voice or video impersonation of a trusted contact

03

URGENCY

Changed bank details, cargo release or bunker payment

04

TRANSFER

Funds, goods or confidential information released

Sometimes it is easier to hack the human….

AI is also embedded in the ships and ports



The same technology can improve safety and create new failure modes

VALUE

- Predictive maintenance
- Route and fuel optimization
- Collision avoidance
- Anomaly detection

Is your Cyber Policy Going to Respond?

Coverage checks

- AI affirmative Cyber wording?
  - Review:
    - triggers
    - definitions
    - exclusions

- Does the scope of the Technology Services encompass AI exposures appropriately?

Taking a balanced view

“Reported shipping incidents fell around 16% in 2025”

Allianz Safety and Shipping Review 2026

Shipping isn’t becoming “more dangerous”.

It has become safer in many traditional aspects. But connectivity, automation and AI are changing where the next generation of losses may come from.

QUESTIONS?