

# Current cyber landscape & Impact on Insurance Market

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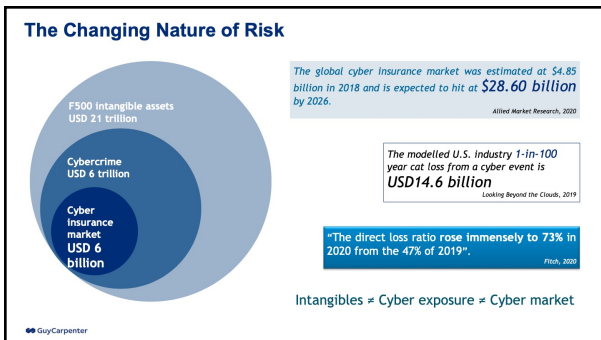
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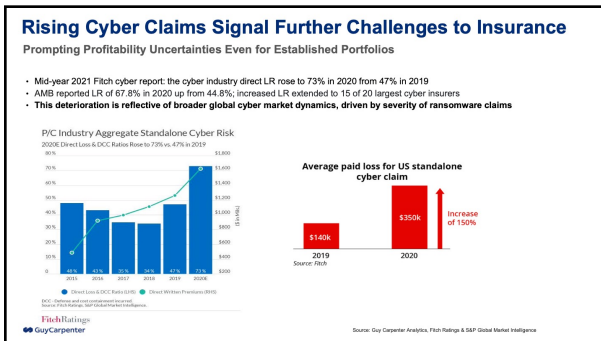
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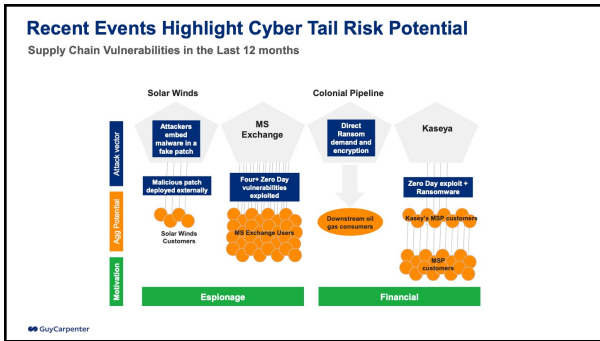
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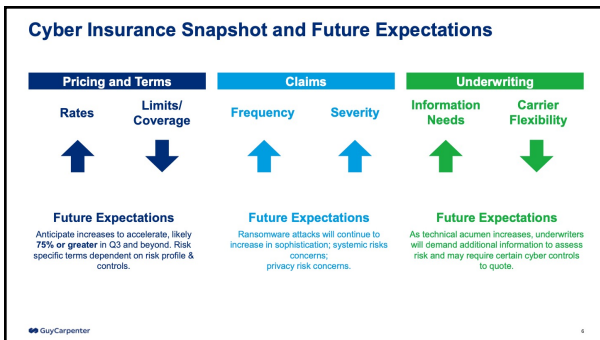
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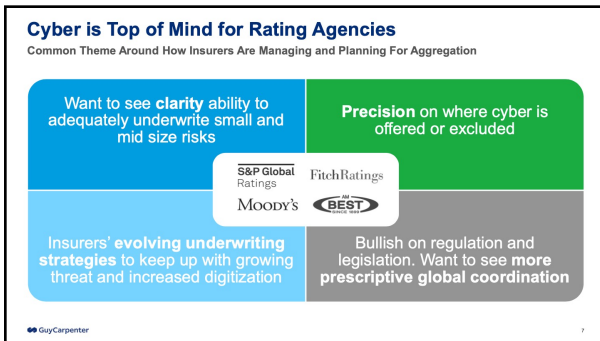
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### Coordination Between Industries

- DarkWeb IQ is recently formed and coming out of stealth**
  - Early stage start up aiming to coordinate public-private fight against ransomware
  - Assessed RaaS activity and works with law enforcement and insurers to enable remediation before a network is breached
- CyberAcuView announced their launch in June 2021**
  - New company created by investment from 7 major cyber insurance carriers to provide certain data.
  - Outcome forecasted to be industry wide mitigation, cyber risk resilience, and foster a competitive cyber insurance marketplace.
- Ransomware Task Force released their first report out in April 2021**
  - Public-private collaboration of experts in cybersecurity, government, law enforcement, civil groups, and international orgs
  - Wrote and released a ransomware framework of 48 preventative and mitigation recommendations
- Verisk Cyber Data Exchange aggregates cyber insurance policy exposure and claims**
  - Provide summarized metrics via interactive dashboards to participating companies updated quarterly
  - Data reported to regulatory agencies by ISO on behalf of insurance companies Will provide account level cybersecurity data back to contributors for portfolios updated

●● GuyCarpenter

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### Future State of Cyber Risk

Other Emerging Risk Areas to Watch

- Internet of Things / Digitization**
- Biometrics**
- Advanced Analytics/ Artificial Intelligence**
- Robotics**
- Advanced Computing**

●● GuyCarpenter

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### Case Study: The InsurTech Business Model

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**At-Bay provides specialty brokers with market leading products and service**

Customer Focused	Product Differentiation	Pricing Sophistication
<ul style="list-style-type: none"><li>Instantly quote and bind on our digital platform or through API integration</li><li>Automated back-office workflows mean faster turn around times</li><li>Service obsessed underwriting team</li></ul>	<ul style="list-style-type: none"><li>Best in industry claims management team</li><li>Security analysis with every quote</li><li>Active risk monitoring at no additional cost</li></ul>	<ul style="list-style-type: none"><li>Leveraging cyber threat data to provide broad coverage and competitive pricing even in a hard market</li></ul>

a b

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**Insurers are deeply challenged by a digital world**

Challenge to underwrite cyber risk	Challenge to modernize an old technology stack
<ul style="list-style-type: none"><li>The past is not a good predictor of future losses</li><li>A full year is too long for a single snapshot UW</li><li>Difficulty to acquire and leverage technical data</li><li>Difficulty to quickly learn and deploy new pricing</li></ul>	<ul style="list-style-type: none"><li>Slow and manual service experience</li><li>Clunky and expensive processes</li><li>Struggle with digital purchasing flows</li><li>Hard to scale human expertise</li></ul>

a b

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**At-Bay is a specialty insurance company built for digital risks**

 <b>Stay away from the worst risks</b> Automated penetration tests (scans) on every account at underwriting to exclude the worst 5-7% of companies.
 <b>Monitor and Actively manage risk of insureds</b> Outside-in scan every two weeks to identify new threats and help companies quickly react and avoid a breach
 <b>Automate workflows</b> End to end automated online journey turns a 3-day process into 30 seconds, unlocks digital channels via API

a b

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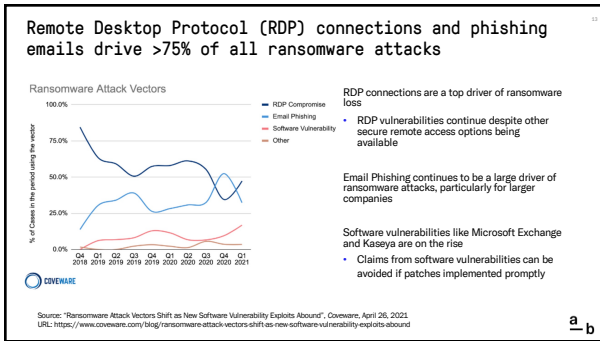
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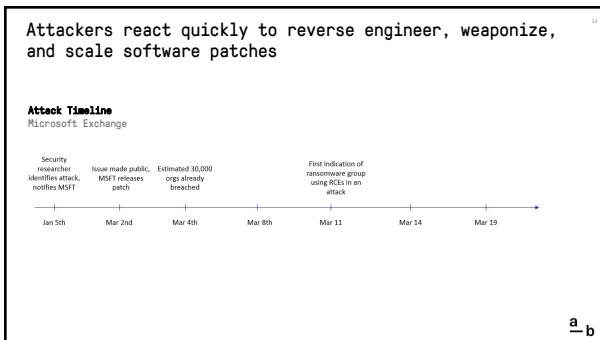
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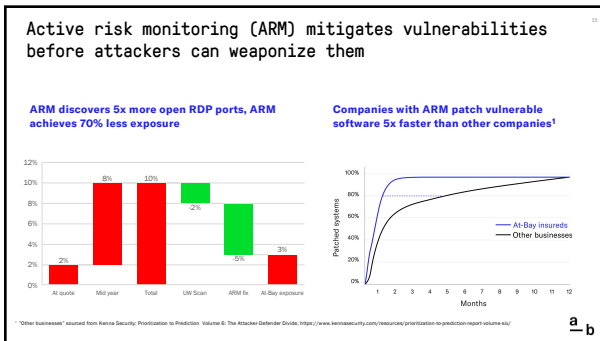
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**Active risk monitoring keeps insureds safe, leading to fewer claims and safer businesses**

**Frequency of all ransomware claims**  
% of policies, annualized frequency

Entity	Frequency of all ransomware claims (% of policies, annualized)
Market	3.0%
At-Bay	0.6%

Active risk monitoring results in lower ransomware claim frequency because:

- Fewer open RDP ports/vulnerabilities
- Use of technical data on things like email protection, in pricing to avoid adverse selection
- Proactive risk mitigation for significant software vulnerabilities

Data based on claims reported and exposure earned from Q4 2020 through Q2 2021 evaluated as of 10/1/2021

**a**  
**b**

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**Announced a multi-year partnership with Microsoft to bring strong security to small businesses**

**Microsoft Partnership**

Microsoft customers will be eligible for premium savings if they implement specific security controls on their Microsoft products

Create superior and data-driven cyber insurance products backed by Microsoft's security solutions

**a**  
**b**

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**Cyber MGAs & MGUs face unique challenges in a hardening market**

**Limited Claims Data**

- Rapid changes in cyber market require insurers to be responsive
- 3<sup>rd</sup> party data often based on publicly disclosed events (not all events are public)
- Historical data may not be reflective of future risk

**Market Profitability**

- MGAs & MGUs often rely on reinsurers to provide capacity
- Burden lies with the MGA/MGU to prove profitable in hardening market

**Aggregation Risk**

- Industry is yet to see a major catastrophic cyber event
- Stress/Scenario Testing essential to help understand the tail risk
- Assumptions underlying external models may not be appropriate for your model

**a**  
**b**

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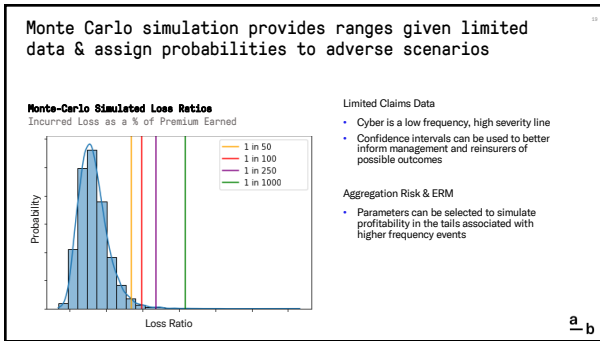
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### Leverage technology to keep risk at-bay

 <p><b>Customer Friendly</b> Simplify the broker experience and automate flows growth using technology</p>	 <p><b>Cyber Security + Insurance Experts</b> Merge the worlds of Actuaries &amp; Cyber Experts to enhance pricing accuracy and avoid adverse selection</p>	 <p><b>Technology in Risk Mitigation</b> Leverage technology at scale to better protect your insureds from loss</p>	 <p><b>Operational Innovation</b> Automate security and regular reporting to allow the business to scale</p>
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**a**  
**b**

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