Pulling Back the Curtain on Data Privacy

An Emerging Issues Presentation

1/31/2024

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Pulling Back the Curtain on Data Privacy

Today's agenda

- An introduction from Verisk's Chief Privacy Officer
- Select legislative and regulatory trends in data privacy
- Data privacy litigation in focus: pixel tracking & data breaches
- Evolving technology and data privacy:
  - Generative AI
  - Brain-computer interfaces
  - Genomics
  - Privacy-enhancing technology

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Samantha Vaughan, ECPC-B FIP CIPP/US-E-C-G-A CIPM/T

Chief Privacy Officer



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Update on Select Legislative & Regulatory Trends



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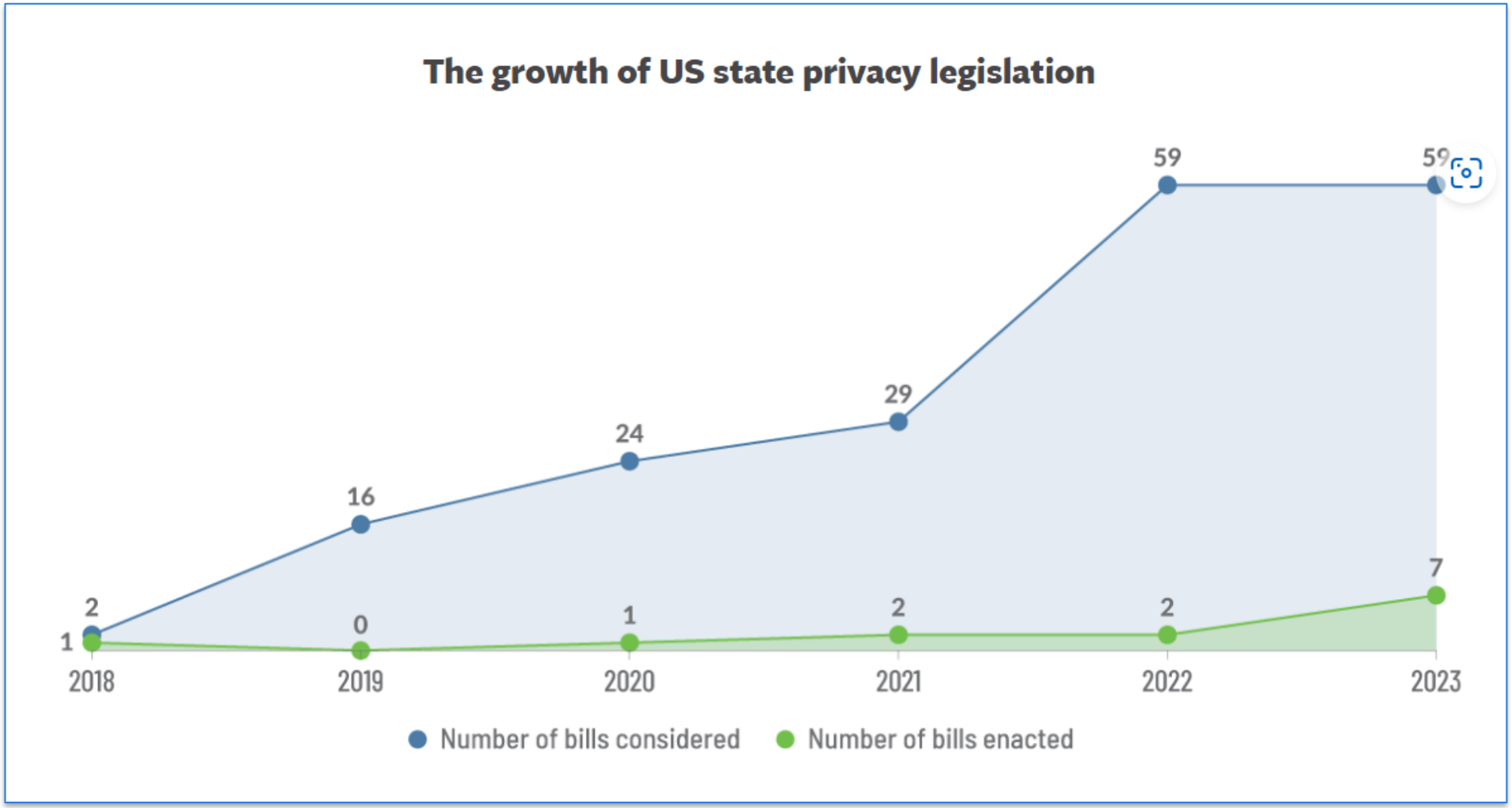


Image from IAPP: http://iapp.org/resources/article/us-state-privacy-laws-report/

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We anticipate additional states enacting privacy laws in 2024

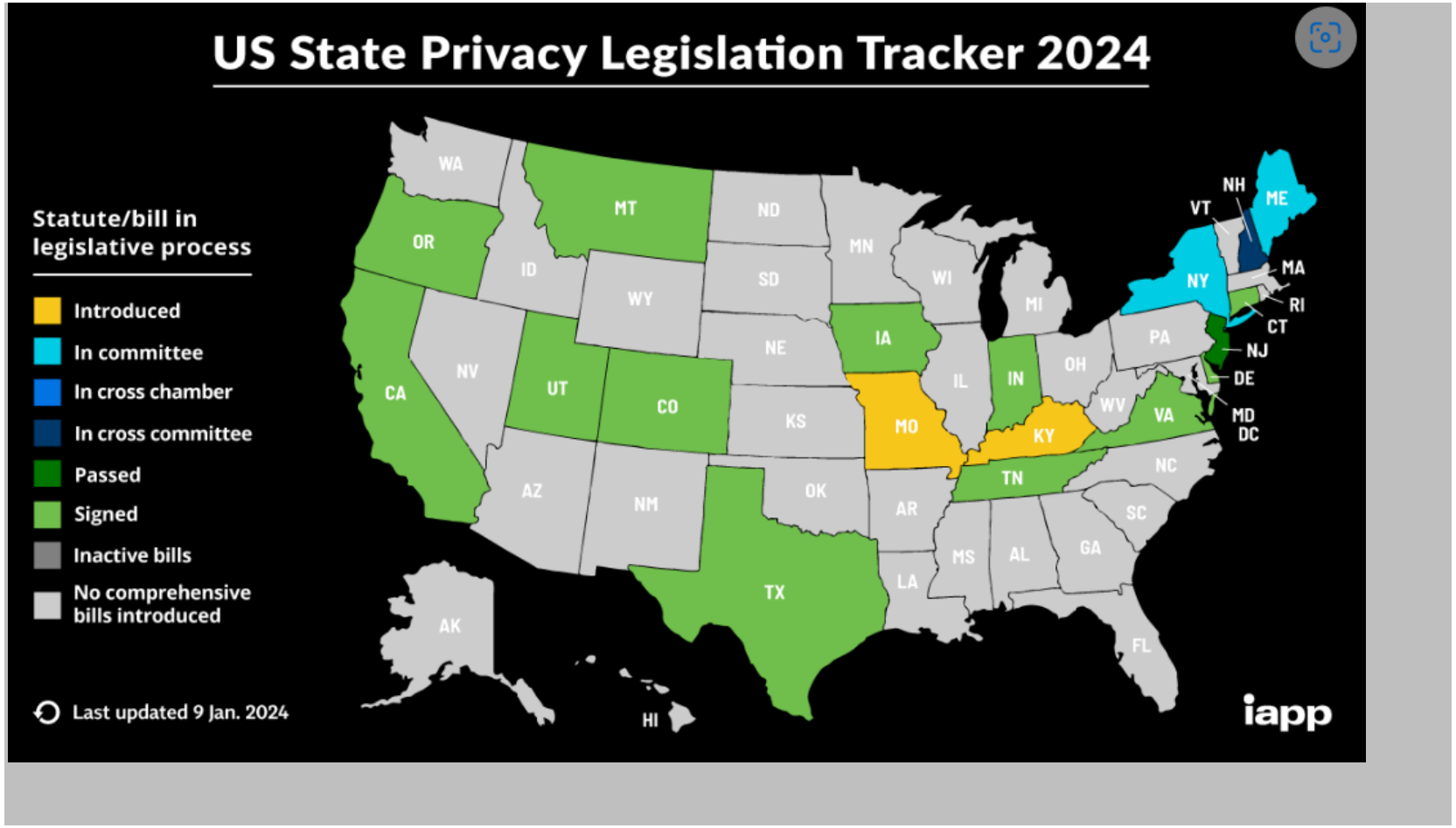


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http://iapp.org/resources/article/us-state-privacy-legislation-tracker/#enacted-laws

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Florida’s Digital Bill of Rights

- Most businesses are exempt from a majority of its scope.
- Only applies to businesses with more than $1 billion in revenue.
- The bill prohibits online platforms from processing children’s personal information if collection would pose substantial harm or risk to their privacy.



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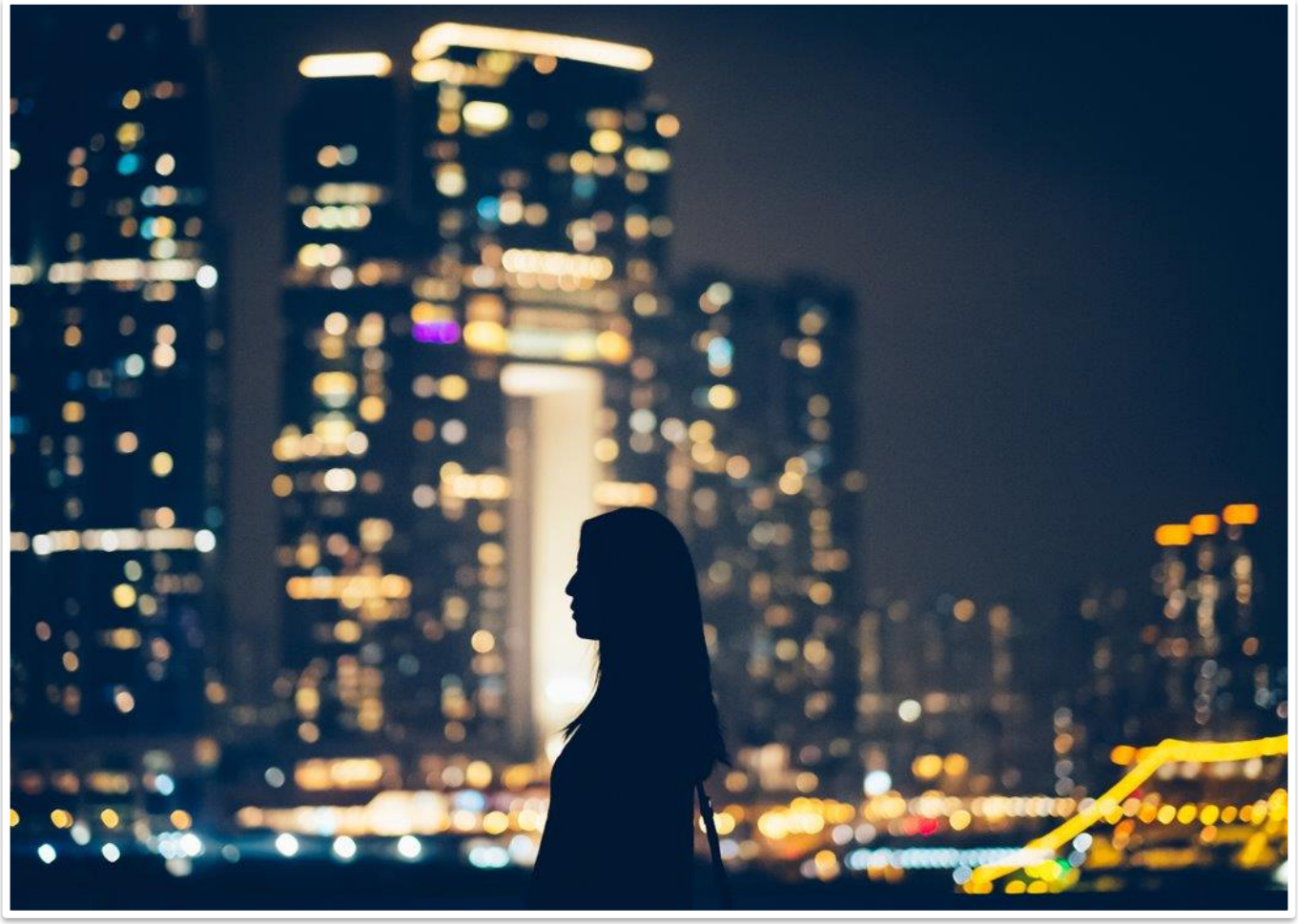
Oregon Consumer Privacy Act (OCPA)

- 12th state to enact comprehensive privacy legislation with the signing of the Oregon Consumer Privacy Act.
- Excludes deidentified data and publicly available data from its definition of personal data and exempts insurers.
- Expansive definitions of covered data, a narrower carveout for HIPAA, and a right for state residents to obtain a specific list of third parties to whom controllers disclosed their personal data.



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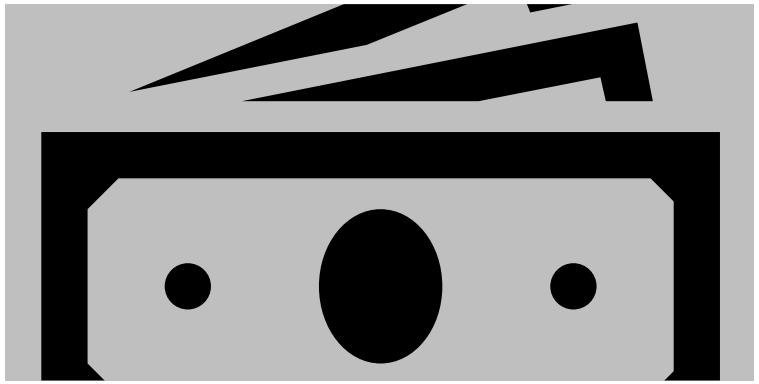
Texas Data Privacy and Security Act



- Applies to nearly anyone who conducts business in Texas or produces products or services consumed by Texans and who processes or engages in the sale of data.
- Small businesses are generally exempt, unless the small business engages in the selling of sensitive data.
- Expands the definition of personal data to include “any information, including sensitive data, that is linked or reasonably linked to an identified or identifiable individual.”

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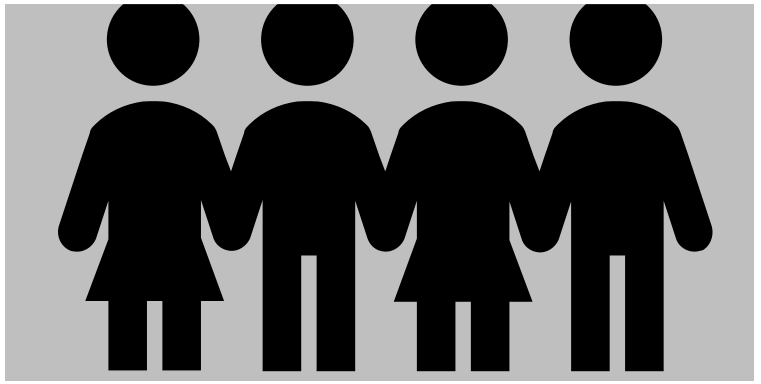
Montana Consumer Data Privacy Act



Does not have a revenue threshold for entities to be subject to privacy obligations.



Prohibits businesses from collecting and processing sensitive data without obtaining the consumer's consent.

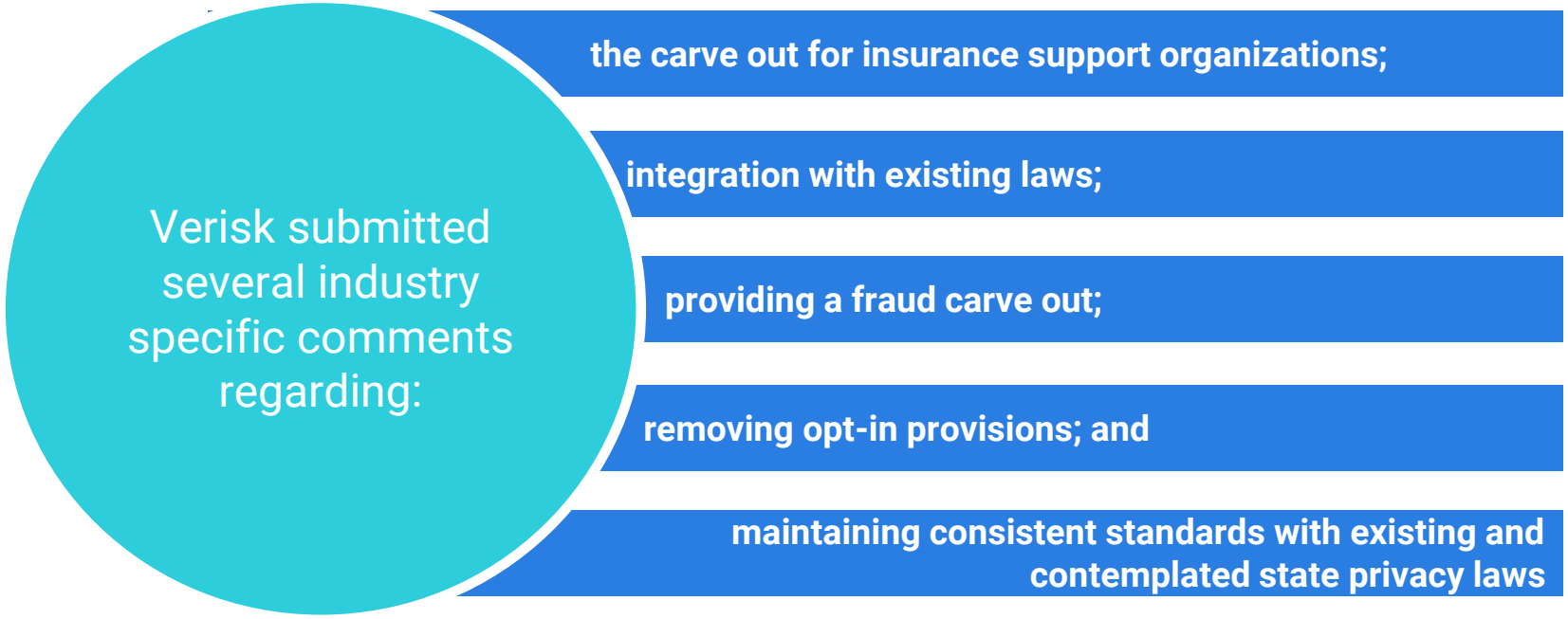


Provides additional safeguards for children between the ages of 13 and 16.

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National Association of Insurance Commissioners NAIC

The NAIC released a draft of a new Consumer Privacy Protections Model Law known as Model 674 that would have broad implications for the insurance industry.



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Insurance claims databases such as ClaimSearch® are a key tool in the fight against insurance fraud.



ClaimSearch® is a comprehensive database to:

- Fight fraud
- Improve claims processing



ClaimSearch® works with:

- 93% of the property/casualty industry
- State workers compensation insurance funds
- Self-insureds
- Third-party administrators
- Natural Insurance Crime Bureau



Other benefits of ClaimSearch®:

- Child support lien network enforcement
- Recoupment of Medicare secondary payer funds
- Office of Foreign Assets Control screening
- Evidence of arson

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We anticipate that the NAIC's Insurance Consumer Privacy Protection Model Law #674 will be back in the spotlight in 2024.

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Data Privacy and Litigation



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The Data Privacy Litigation Landscape: Pixels and Plaintiffs

Pixel Tracking

Third-party provider generates tracking pixels for a website or email

May collect user purchase data, form information, other personal data

Industry Footprint

Potentially *any* org with videos on a website using tracking

Potentially *any* org leveraging tracked email campaigns

Litigation Trend

256 lawsuits reportedly filed in 2023 – up **89%** from 2022

Defendants include healthcare, grocery, pharma, tax prep firms, fast food



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Sources: See Appendix

The Data Privacy Litigation Landscape: Data Breaches

Data Breaches

Data breaches up almost **70%** in 2023 vs. 2022

Nearly **80%** of breaches targeted cloud data

Industry Footprint

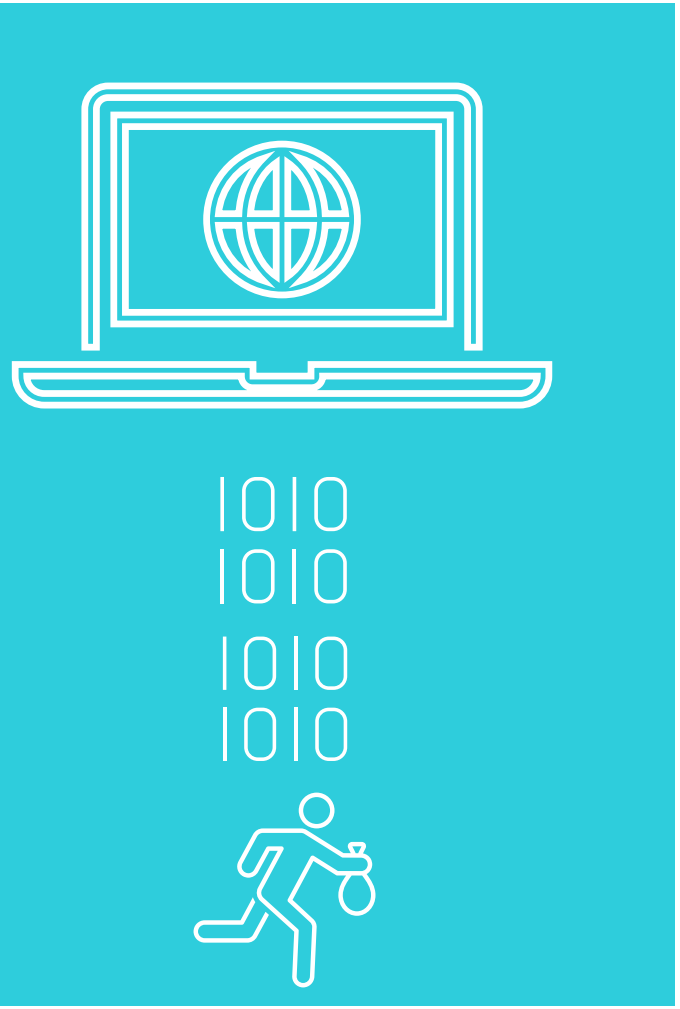
98% of organizations have a relationship with a vendor that has been breached

Approximately 1.5 billion records breached in 2022

Litigation Trend

Monthly class action filings doubled in 2023

Average cost of a breach: $4.5 million



Sources: See Appendix

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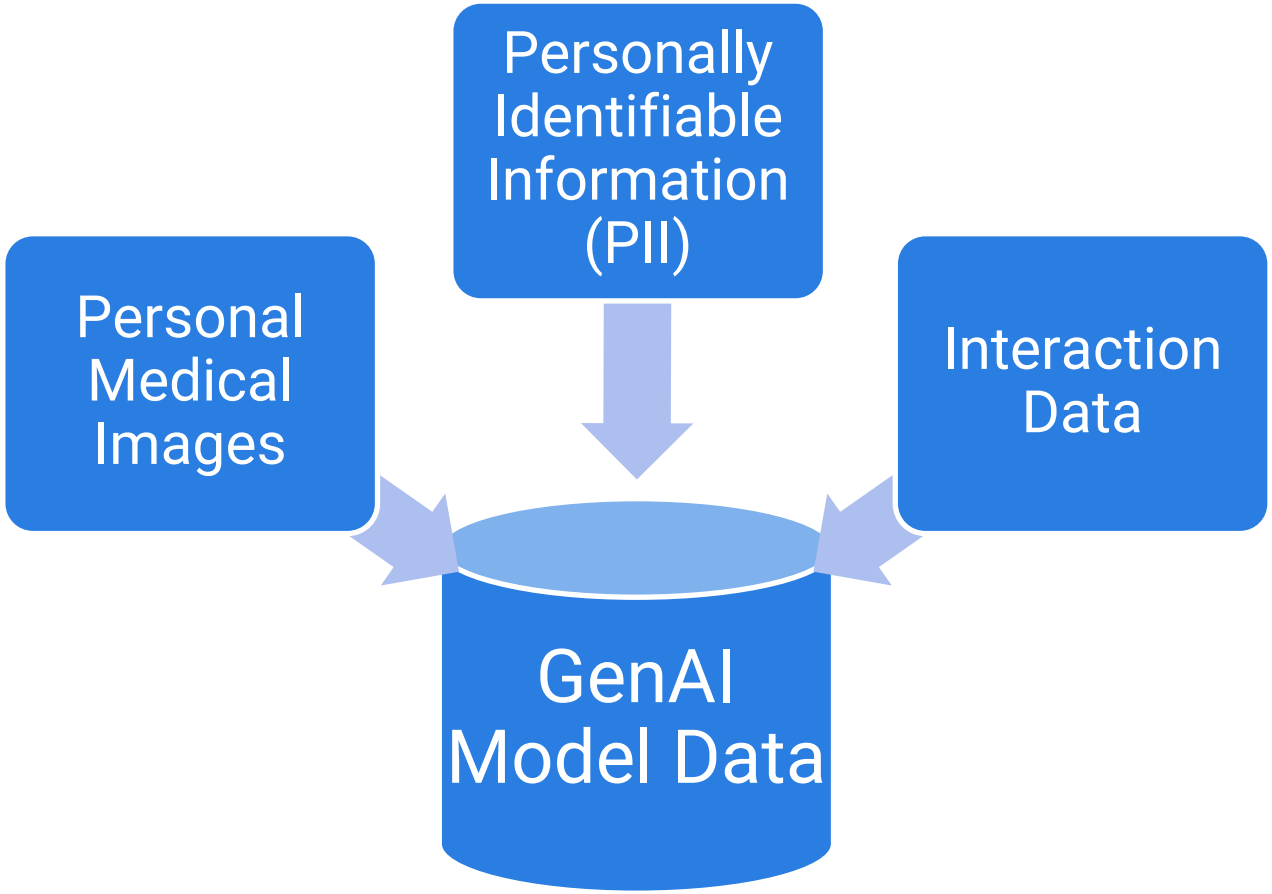
Generative AI and Privacy: A Leaky Cauldron?



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The Data Privacy Landscape: Generative AI

What data could be found in a GenAI model?



Potential Training Data Risks

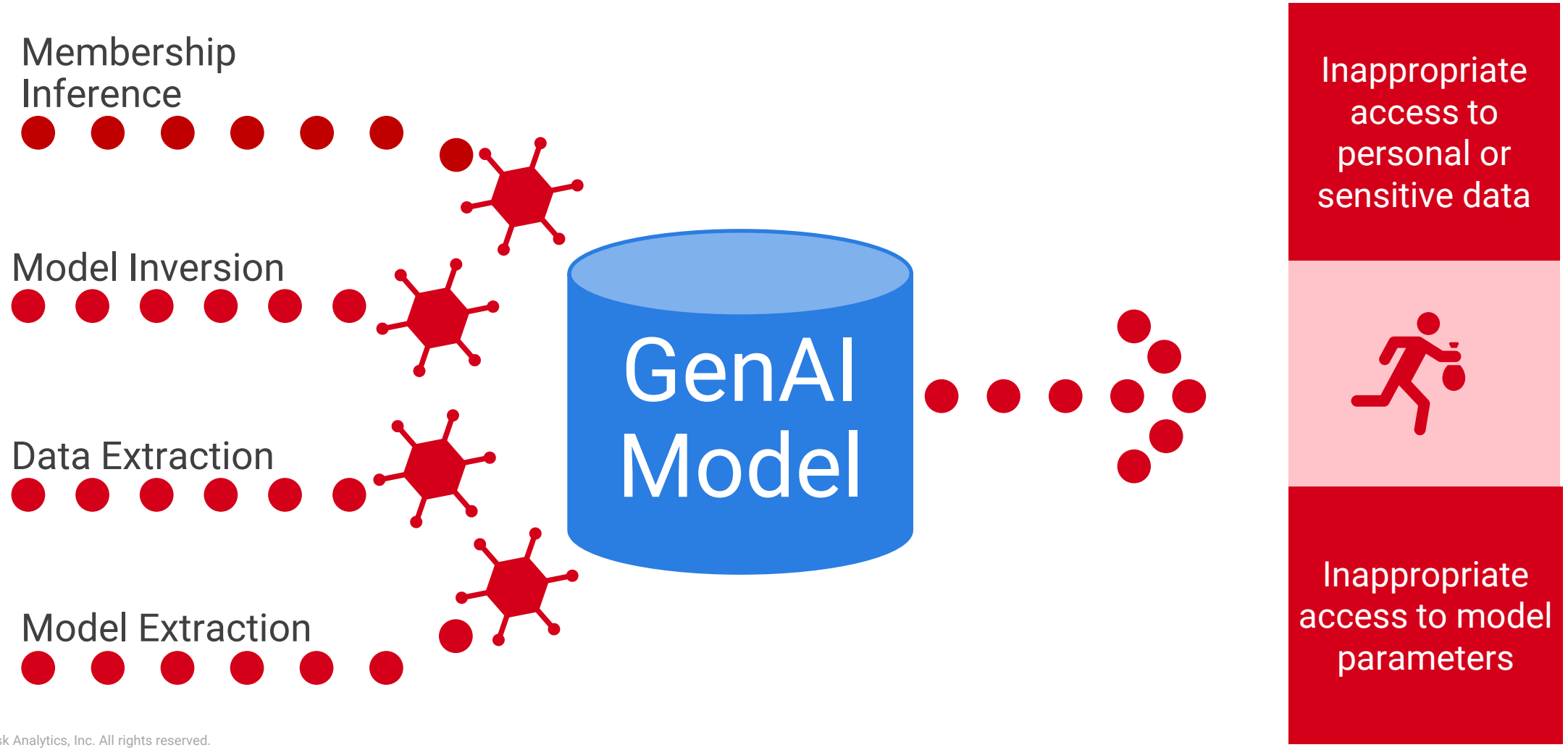
- Fines
- Model and algorithm destruction
- Data deletion
- Possible litigation

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Sources: See Appendix

The Data Privacy Landscape: Generative AI

Cyberattacks against GenAI models



Sources: See Appendix

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Neuroprivacy: Penny for Your Thoughts?



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Brain-Computer Interfaces (BCIs)

Technology

- **Invasive**: Physical connection to the brain
- **Noninvasive:** No physical connection to the brain
- **Electroencephalography (EEG):** Noninvasive, measures electrical signals from brain

Results

- Manipulate robotic limbs
- Generate text and speech
- Interpret emotional states

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Sources: See Appendix

Brain Drain

Current uses cases for neuro data



Use Cases

Market research: How do you *really* feel?

Gaming: Control gameplay via thoughts.

Employee monitoring: Fatigue detection.



Potential Risks & Benefits

Emotional trauma/physical risk

Errors in understanding neural outputs/physical damage

Injury/accident prevention

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Sources: See Appendix

Genomic Privacy: The Data in the DNA



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Genomic Privacy

Data from DNA

Types of genomic data may include:

- DNA sequences
- Variants
- Gene activity

Possible uses for genomic data:

- Vaccine development
- Disease diagnosis and treatment
- Agriculture
- Biofuels
- Consumer testing and genealogy
- Law enforcement



The footprint of genomic data:

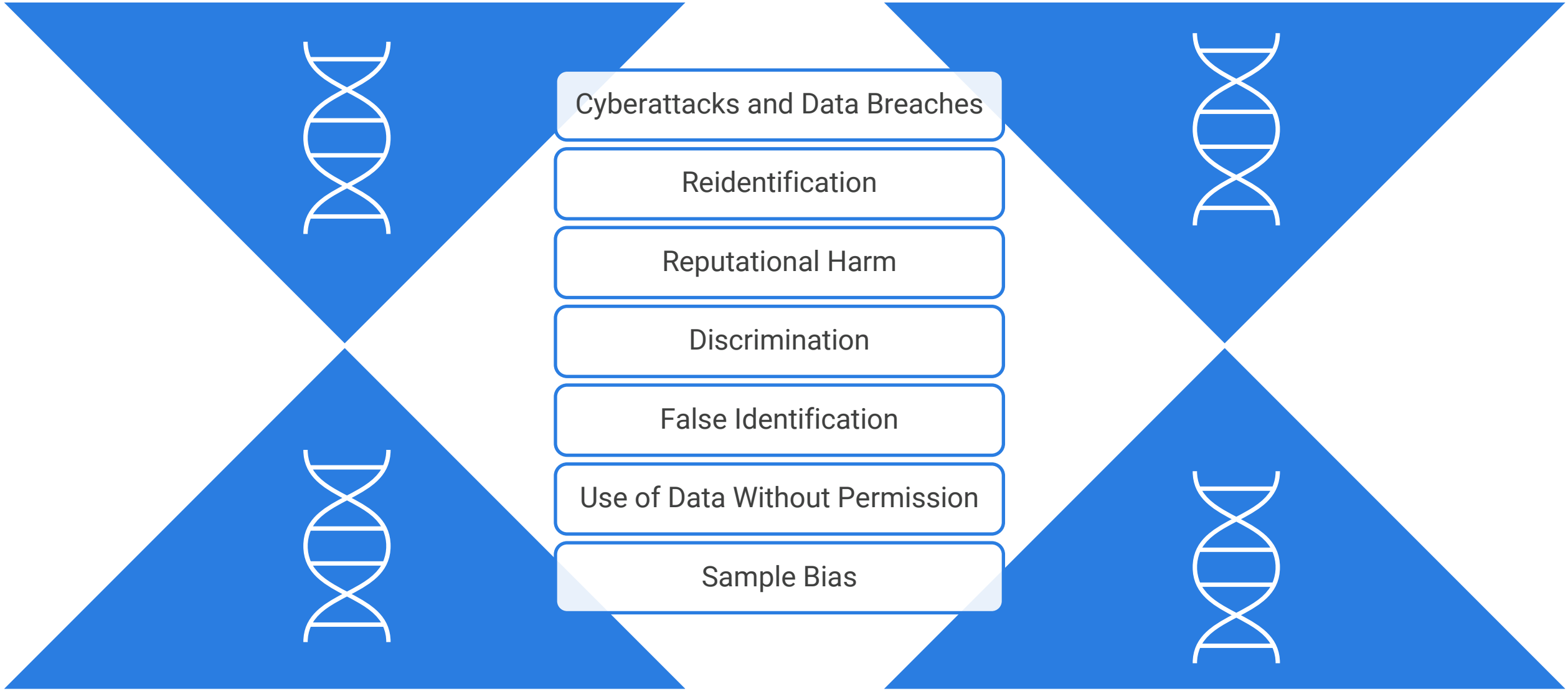
- **3 million** datasets at the NIH
- NIH processed **40,000** requests for data access in one year
- **40 million** consumers used a consumer DNA testing service
- **Thousands** of public and private entities believed to touch genomic data

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Sources: See Appendix

Genomic Privacy

Potential risk pathways



Sources: See Appendix

Privacy Enhancing Technologies: Rewards, Risks



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Privacy Enhancing Technologies

A variety of approaches

Cryptography

- Homomorphic Encryption
- Trusted Execution Environment

Distributed Analytics

- Federated Learning
- Multi-Cloud

Anonymization

- Differential Privacy
- Synthetic Data



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Sources: See Appendix

Privacy Enhancing Technologies

Possible risks

Cryptography

- Lack of Security Standards
- Side-Channel Attacks

Distributed Analytics

- Intercepted Communications
- Bias/Fairness

Anonymization

- Data Leakage
- Accuracy



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Sources: See Appendix

Our Data Privacy Resources

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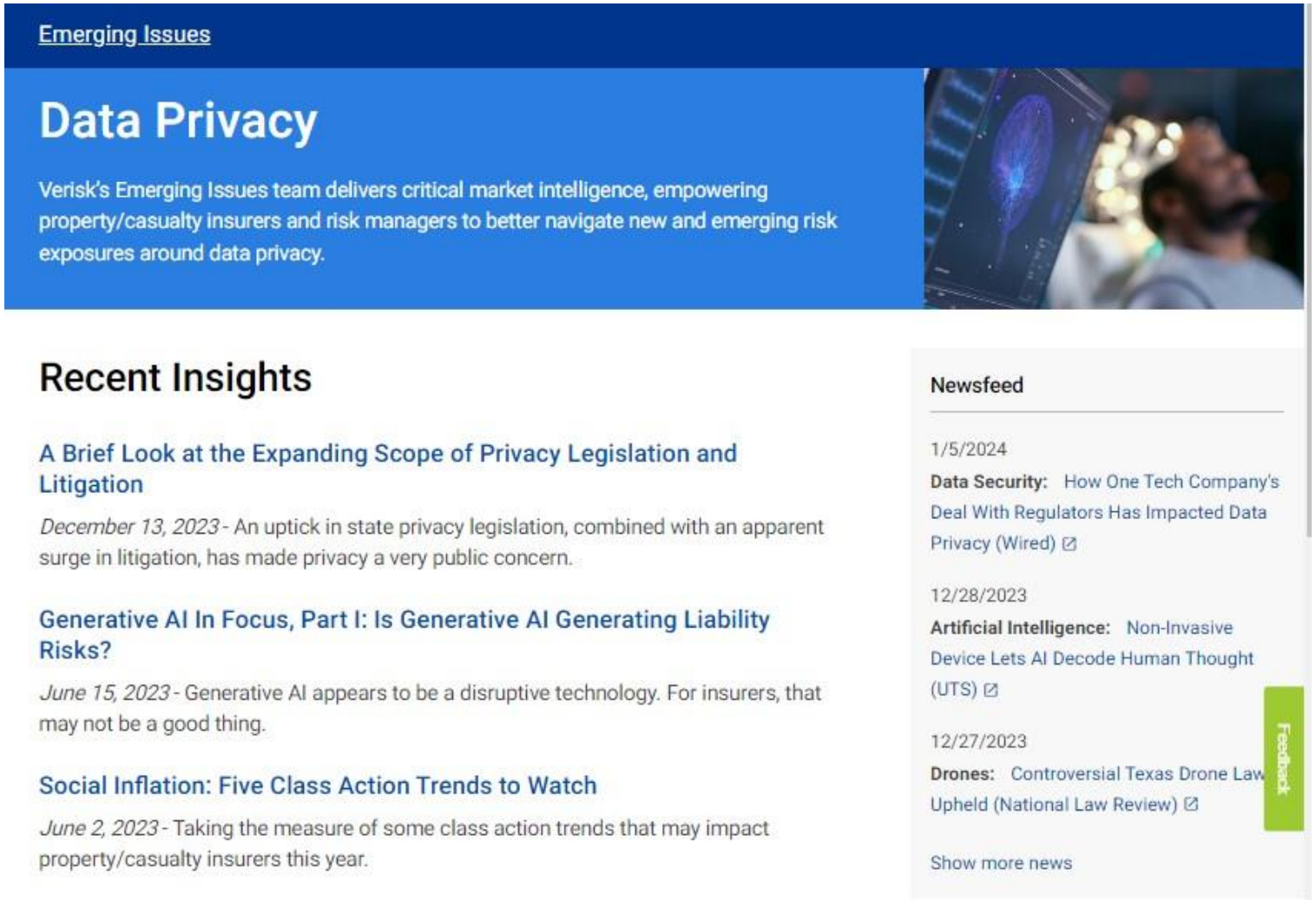
Emerging Issues Privacy Page

- Primer on data privacy
- Regularly updated newsfeed curated by Emerging Issues staff
- Research articles in reverse-chronological order

Emerging Issues Newsletter

- Weekly market intelligence on emerging risks

Questions:
EmergingIssues@Verisk.com



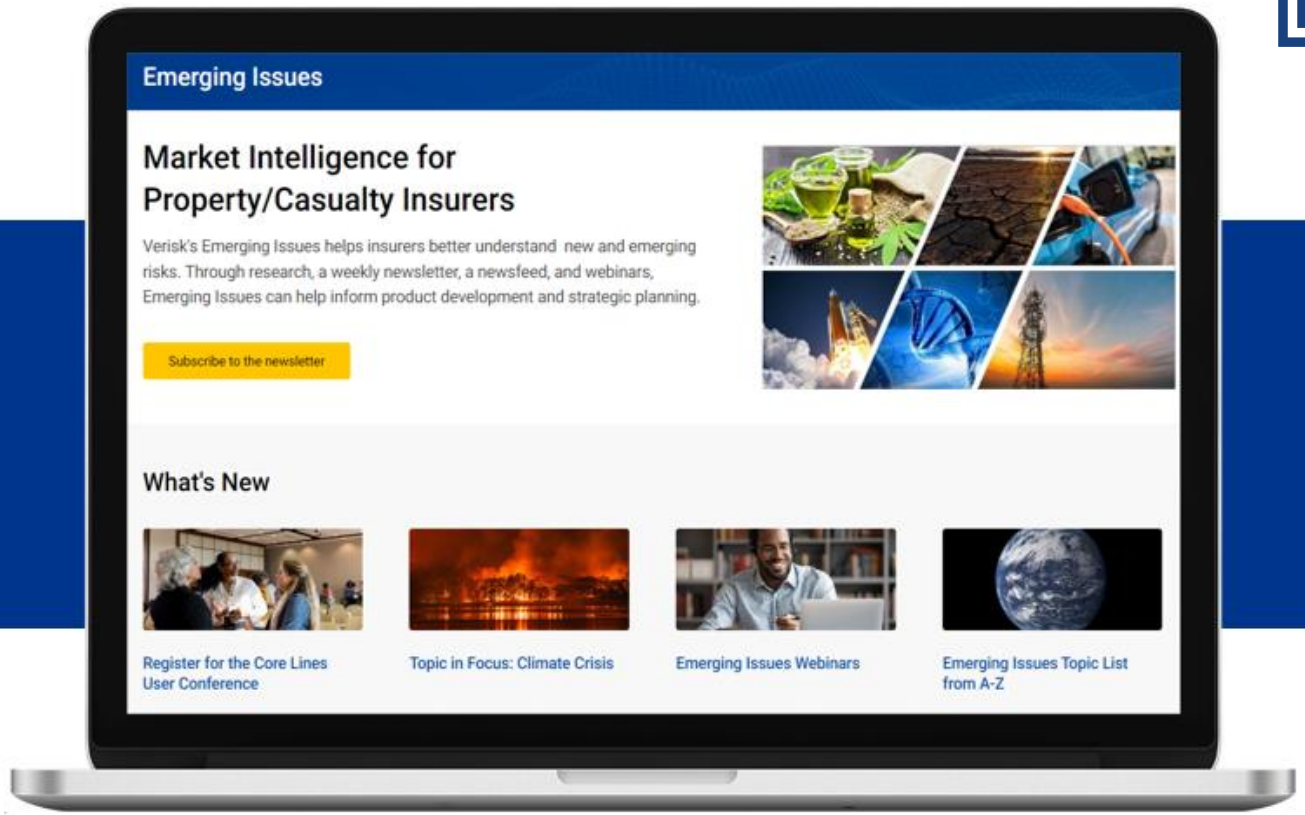
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Coming Soon… The 2024 Emerging Issues Bracket Challenge



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What’s New at Emerging Issues



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Appendix: Sources

Slide 7 – Florida's Digital Bill of Rights

https://www.flsenate.gov/Session/Bill/2023/262

Slide 8 – Oregon Consumer Privacy Act

https://olis.oregonlegislature.gov/liz/2023R1/Downloads/MeasureDocument/SB619/Enrolled

Slide 9 – Texas Data Privacy and Security Act

https://capitol.texas.gov/tlodocs/88R/billtext/pdf/HB00004F.pdf#navpanes=0

Slide 10 – Montana Consumer Data Privacy Act

https://leg.mt.gov/bills/2023/billpdf/SB0384.pdf

Slide 15 – Data Privacy & Litigation: Pixels and Plaintiffs

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Slide 19- Generative AI and Data Privacy

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Slide 24 – Genomic Privacy

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Slide 25 – Genomic Privacy

"Cybersecurity of Genomic Data: NIST IR 8432," *National Institute of Standards and Technology,* December 2023.

Slide 27 – Privacy Enhancing Technologies

"Privacy-Enhancing and Privacy Preserving Technologies: Understanding the Role of PETs and PPTs in the Digital Age," *Information Policy Centre,* December 2023.

Slide 28 – Privacy Enhancing Technologies

"Privacy-Enhancing and Privacy Preserving Technologies: Understanding the Role of PETs and PPTs in the Digital Age," *Information Policy Centre,* December 2023.

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Questions?

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