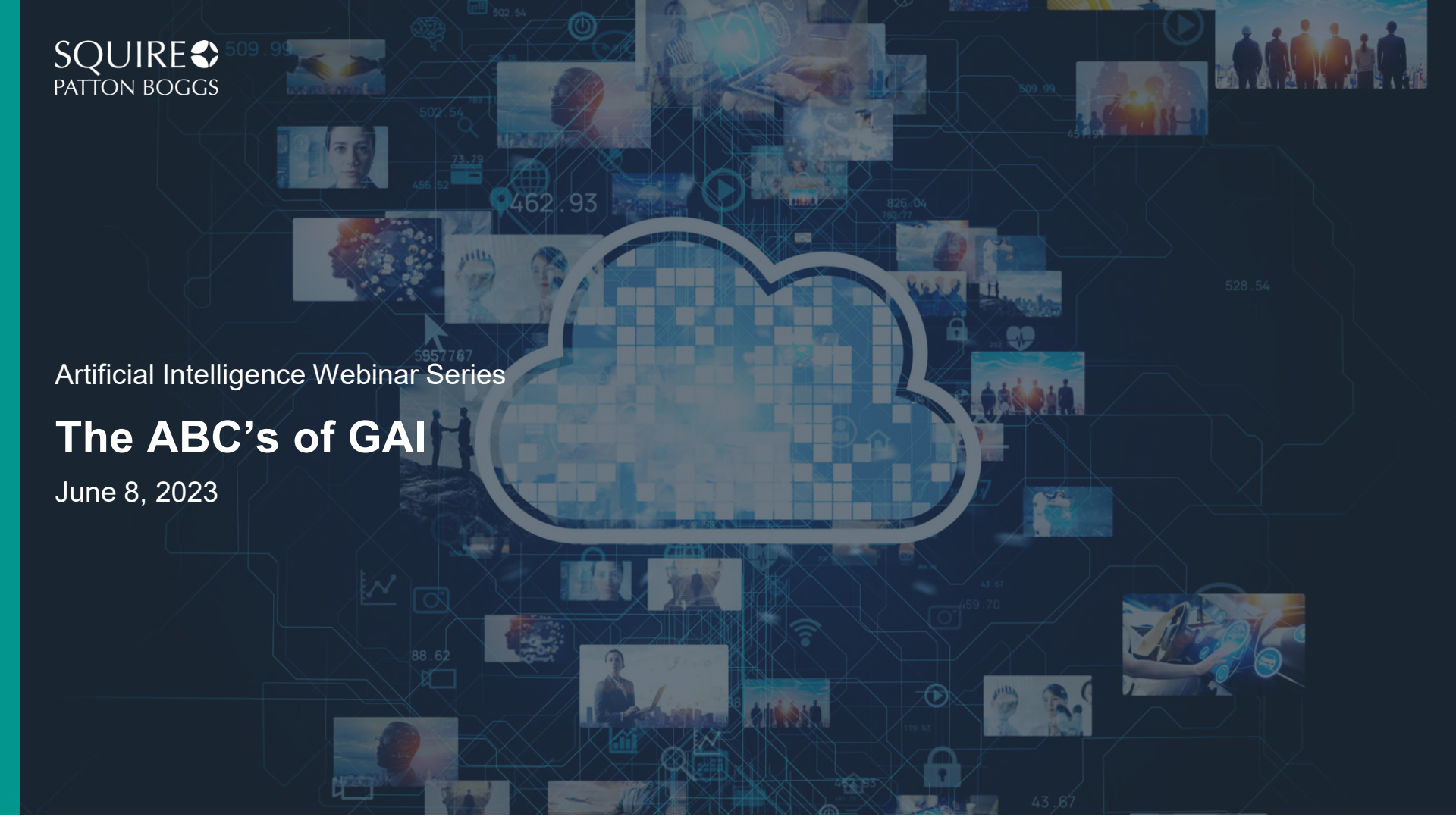
SQUIRE PATTON BOGGS



Artificial Intelligence Webinar Series

The ABC's of GAI

June 8, 2023

Who we are

Alan L. Friel
Partner, Los Angeles
T +1 213 689 6518
alan.friel@squirepb.com

Annette Demmel
Partner, Berlin
T +49 30 72616 8108
annette.demmel@squirepb.com

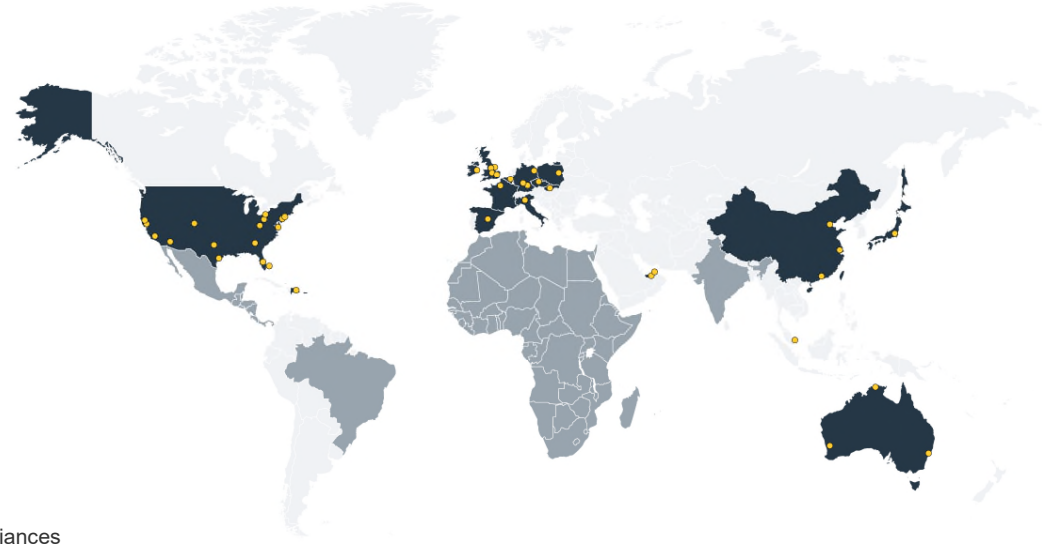
Julia B. Jacobson
Partner, New York
T +1 212 872 9832
julia.jacobson@squirepb.com

SQUIRE PATTON BOGGS

Our Global Footprint

Abu Dhabi
Atlanta
Beijing
Berlin
Birmingham
Böblingen
Bratislava
Brussels
Cincinnati
Cleveland
Columbus
Dallas
Darwin
Denver
Dubai
Dublin
Frankfurt
Hong Kong
Houston
Leeds
London
Los Angeles
Madrid
Manchester
Miami
Milan
New Jersey
New York
Palo Alto
Paris
Perth
Phoenix
Prague
San Francisco
Santo Domingo
Shanghai
Singapore
Sydney
Tampa
Tokyo
Warsaw
Washington DC

Africa
Brazil
Caribbean/Central America
India
Israel
Mexico

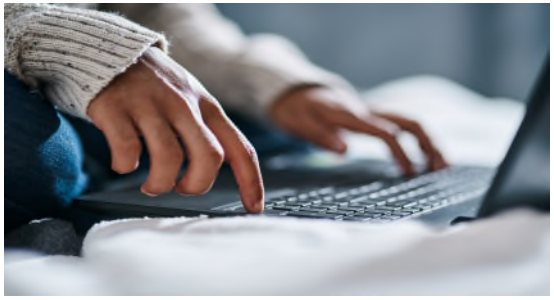


Office locations

Regional desks and strategic alliances

What We'll Cover

SQUIRE PATTON BOGGS



What is Generative Artificial Intelligence (GAI)?

How is GAI used?

What laws apply to GAI? US, EU and Beyond

Key Takeaways for GAI

What is Generative AI?

What is Artificial Intelligence?

SQUIRE PATTON BOGGS

It uses machine and/or human-based data and inputs to (i) perceive real and/or virtual environments; (ii) abstract these perceptions into models through analysis in an automated manner (e.g., with machine learning), or manually; and (iii) use model inference to formulate options for outcomes. AI systems are designed to operate with varying levels of autonomy.

Organisation for Economic Cooperation and Development (OECD)

An AI system is a machine-based system that is capable of influencing the environment by producing an output (predictions, recommendations or decisions) for a given set of objectives.

NIST AI Risk Management Framework

AI is defined in many ways and often in broad terms … it may depend on who is defining it for whom, and who has the power to do so … what matters more is output and impact.

Federal Trade Commission (June 2022)

An engineered system that generates outputs such as content, forecasts, recommendations or decisions for a given set of human-defined objectives.

ISO/IEC 22989: 2022 (en)

What is Generative Artificial Intelligence (GAI)?

SQUIRE PATTON BOGGS

"Generative AI refers to technology that can be used to create new content based on large volumes of data that models have been trained on. This can include audio, code, images, text, simulations, and videos."

– UK Department of Education

"… create[s] new content in response to prompts based on their training data."

– OECD

"[C]olloquial term used to refer to chatbots developed from large language models and to technology that stimulates human activity, such as software that creates deepfake videos and voice clones."

– U.S. Federal Trade Commission

"A generative model can take what it has learned from the examples it's been shown and create something entirely new based on that information."

- Douglas Eck, a senior research director at Google

"Generative AI refers to a class of AI systems that, after being trained on large data sets, can be used to generate text, images, videos or other outputs from a given prompt. "

– President's Council of Advisors on Science and Technology

Examples of GAI Systems

SQUIRE PATTON BOGGS

BARD

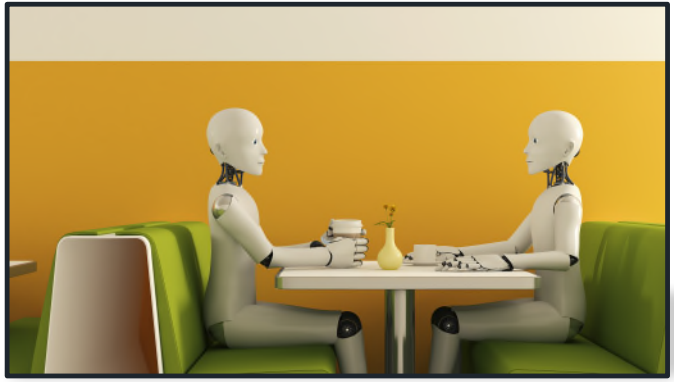
"Google Bard is a large language model (LLM) chatbot developed by Google AI. It is powered by the PaLM LLM, which is a more advanced version of the LaMDA LLM. Bard can generate text, translate languages, write different kinds of creative content, and answer your questions in an informative way."

- According to Google Bard

ChatGPT

"ChatGPT is designed to generate human-like responses in natural language conversations. It can understand and generate text in a wide range of topics and can carry on discussions on various subjects. The model is trained to generate responses based on the context provided in the conversation and can provide informative, creative, or helpful replies."

- According to ChatGPT



Examples of GAI Systems

DALL-E 2

"DALL-E is trained using a large dataset of text-image pairs, where the model learns to associate textual descriptions with corresponding visual representations. It can generate a wide variety of images based on detailed textual prompts, including objects, animals, scenes, and even abstract concepts."

- According to ChatGPT

Midjourney

"Midjourney is a text-to-image AI art generator … It is similar to DALL-E in that it can generate images from text descriptions … Midjourney uses a diffusion model, which is a type of machine learning model that can be used to generate images from text descriptions. Diffusion models work by starting with a random image and then gradually adding detail to the image until it matches the text description."

- According to Google Bard

Some GAI Lingo

SQUIRE PATTON BOGGS

Neural Networks

"[A] subset of machine learning algorithms…[that] use a combination of weights and activation functions [that] translate a set of data inputs into predictions for outputs, measure the 'closeness' of these predictions to reality, and then adjust the weights it uses to narrow the distance between predictions and reality."

– US-EU Trade and Technology Council Inaugural Joint Statement

Large Language Model (LLM)

"…one type of generative AI since they generate novel combinations of text in the form of natural-sounding language. And we can even build language models to generate other types of outputs, such as new images, audio and even video, like with Imagen, AudioLM and Phenaki."

- Google, Ask a Techspert

Training Dataset

"A training dataset is used to teach [AI] models to yield the desired output and includes inputs and outputs that are correctly categorized or 'labeled', which allow the [AI] model to learn over time."

– U.S. General Services Administration

Some GAI Lingo

SQUIRE PATTON BOGGS

Deepfake

". . . believable, realistic videos, pictures, audio, and text of events which never happened" created using artificial intelligence/ machine learning."

– U.S. Department of Homeland Security

AI Hallucinations

"…[AI] models generate incorrect outputs but articulate them convincingly."

– OECD AI Policy Observatory

Voice Cloning

"A scammer could use AI to clone the voice of your loved one. All he needs is a short audio clip of your family member's voice — which he could get from content posted online — and a voice-cloning program. When the scammer calls you, he'll sound just like your loved one."

– FTC Consumer Advice


How is GAI used?

GAI Use Cases

SQUIRE PATTON BOGGS

- Consumers – Digital Assistants (e.g., replying to emails), Dating Apps
- Artists – Inspiration
- Employees – Applicant Interviews, Questionnaires
- Business – Customer Service
- Academia – Teachers
- Medical – Doctors
- Courts – Research (but lawfulness for legal briefs and other purposes is questionable)


What laws apply to GAI?
US, EU and Beyond
squirepattonboggs.com

US Regulatory Landscape

U.S. GAI Legal Framework

SQUIRE PATTON BOGGS

- ✓ **Consumer Protection Law**
- ✓ **Copyright Law**
- ✓ **Contract Law**
- ✓ **Privacy & Data Protection Law**

GAI: Consumer Protection

SQUIRE PATTON BOGGS

Section 5 of the U.S. Federal Trade Commission Act (FTC Act) and state mini FTC Acts prohibit unfair and deceptive trade practices.

The FTC has drawn on both deception and unfairness (i.e., do more benefit than harm), signaling the FTC's commitment to regulating GAI systems:

- ***Ads for fake AI and other software spread malicious software (April 13, 2023)***
- ***Chatbots, deepfakes, and voice clones: AI deception for sale (March 20, 2023)***

June 7, 2023: Two U.S. Senators raise concerns about potential for "misuse in spam, fraud, malware, privacy violations, harassment, and other wrongdoing and harms" in GAI systems.

March 30, 2023: CAIDP submitted a complaint to the FTC, urging the FTC to pause commercial deployment of ChatGPT and alleging OpenAI is non-compliant with Section 5 of the FTC Act, the FTC's AI guidance and industry standards.

GAI: Consumer Protection

SQUIRE PATTON BOGGS

Majority of U.S. states have 'mini' FTC Acts

- Example: M.G.L. Chapter 93A, §2: "Unfair methods of competition and unfair or deceptive acts or practices in the conduct of any trade or commerce are hereby declared unlawful."

Some state consumer protection laws are broader than the FTC Act

- Some offer private right of action
- Massachusetts law offers multiple damages - , up to three but not less than two times actual damages or twenty-five dollars if the court finds that the act or practice was "a **willful or knowing violation** … or that the refusal to grant relief upon demand was made in **bad faith with knowledge or reason to know that the act or practice complained of violated** …"

GAI: Consumer Protection

SQUIRE PATTON BOGGS

In the Matter of Everalbum, Inc. (FTC Settlement, May 5, 2022)

In 2017, Everalbum Inc., launched a new app photo tagging feature that allowed users to tag faces in photos and group then by face. Initially, the feature was on by default with no option to turn it off and powered by publicly-available facial recognition technology.

Concurrently, Everalbum worked on developing its own facial recognition AI, creating four training datasets from a combination of publicly-available datasets and the photos of its app users.

FTC alleged that Everalbum misrepresented its automated processing on users' photos and deletion of users' photos at account termination. FTC required Everalbum to "forfeit the fruits of its deception" by deleting data processed without users' consent and destroying algorithms that Everalbum developed using users' photos and videos collected through deceptive means.

Settlement with WW International, fka Weight Watchers, and Kurbo, Inc (FTC Settlement, March 4, 2022)

WW required to pay a $1.5m penalty, delete personal information collected from children in violation of the Children's Online Privacy Protection Act (COPPA) and destroy models and algorithms developed using that personal information.

GAI: Copyright

SQUIRE PATTON BOGGS

GAI systems may infringe human artists' copyrights by using existing artworks in training data and generating output resembling image inputs.

Copyright owners can prove that outputs from AI programs infringe their copyrights if they prove that the AI program had access to work and created substantially similar outputs.

Access: this can be shown by evidence that the Ai program was trained using the existing work, like if the work was on a publicly accessible website and was downloaded or scraped from that site.

Substantially Similar: test varies across courts, but generally the AI-work's "concept and feel" must be substantially similar to the existing work, or that a reasonable person would fail to differentiate between the two.

Two kinds of AI-generated images may cause issues:

1. **AI works involving fictional characters – characters may have copyright protection.**
2. **Artistic works "in the style of" a particular artist or author – less risky but liability may accrue if AI programs mass produce artists' works and thereby devalue them.**

See Congressional Research Service Report, *Generative Artificial Intelligence and Copyright Law* (2/24/23), https://crsreports.congress.gov/product/pdf/LSB/LSB10922.

GAI: Copyright Law

SQUIRE PATTON BOGGS

- In the late 1800s, the Supreme Court established a **human authorship** requirement for a work to be copyrightable.
- In considering the copyrightability of images generated by GAI systems, the U.S. Copyright Office (USCO) has deliberated the authorship requirement.

So far, USCO considers GAI-generated content as "authorless." So, generated images cannot be copyrighted by users that do not control the machine's process, even when a human enters text prompts into an AI program and iterates images through careful crafting of prompts.

- Consider: Is the GAI system merely an **"assisting instrument,"** or does it actually **"conceive and execute"** the elements of authorship?
  - Difficult question, but USCO is leaning towards NOT allowing creators the ability to copyright GAI-generated content.

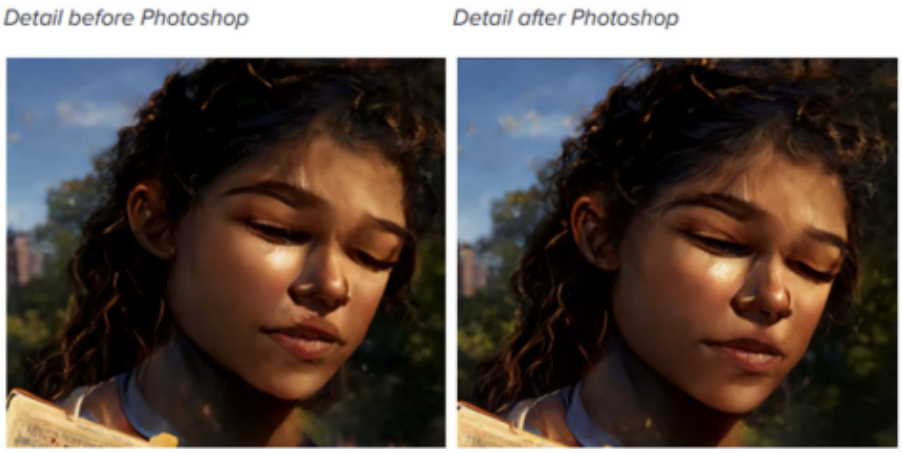
https://copyright.gov/docs/zarya-of-the-dawn.pdf

GAI: Copyright Law

SQUIRE PATTON BOGGS

Copyright Office: No copyright for *Zarya of the Dawn* comic book

Even when thousands of text prompts were carefully crafted to generate desired images AND the generated images were further edited / photoshopped by the author.



***Only* the "text" and the "selection, coordination and arrangement of text created by the author and artwork generated by artificial intelligence" are copyrightable, but *not* the actual images.**

GAI: Copyright Litigation

Getty Images v. Stability AI (filed February 2023)

- Complaint asserts that Stability AI, through its model Stable Diffusion, used Getty Images content for training purposes and infringed Getty's copyrights.
- Stability AI allegedly copied 12,000,000+ copyrighted images, along with captions and metadata.
- In its generated images, Stability AI even included a distorted "Getty Images" Watermark
- According to Getty Images, Stable Diffusion is able to generate artificial images because it was trained on proprietary content belonging to Getty Images and others. Stable Diffusion produces images that are highly similar to and derivative of the Getty Images proprietary content
- Plaintiff requests injunction, destruction of Stable Diffusion versions that were trained on Getty Images, actual damages and profits, and statutory damages.

GAI: Copyright Litigation

SQUIRE PATTON BOGGS

Doe 1 v. Github, Microsoft, & OpenAI (filed November 2022)

- **Complaint asserts violations of Digital Millennium Copyright Act (DMCA) among other laws.**
- **Github's AI program, Copilot, is able to automatically write working code when a programmer starts typing.**
- **Copilot allegedly violates and ignores licenses offered by software developers.**
- **Copilot used publicly accessible repositories on Github to train the program to generate code.**
- **Plaintiffs request injunction, statutory damages exceeding *$9,000,000,000* or actual damages and profits, additional damages for harms resulting from the breach of licenses and punitive damages.**

Anderson v. Stability AI, Midjourney, & DeviantArt (filed January 2023)

- **The class argues that Defendants used the Plaintiffs' works as training tools for their AI programs.**
- **The U.S. District Court for the Northern District of California will likely have to grapple with whether this training is fair use or copyright infringement.**
- **Plaintiffs request statutory damages, actual damages, injunction, and punitive damages.**

GAI: Contract Law

SQUIRE PATTON BOGGS

Contracting Complexity for GAI Systems

- Use of open source software?
- Source of training data?
- IP rights to inputs and outputs?
- Responsibility for end-user transparency?
- Responsibility for honoring privacy choices?
- Representations and warranties
- GAI Provider Position: "AS IS"
- GAI Business Customer: GAI provider must stand behind its technology
- Which party is responsible for ongoing testing for accuracy, reliability, lawfulness, etc. – vary by use case?
- Liability Allocation – indemnities, liability limitations and caps, exclusions

GAI: U.S. State Privacy Laws

SQUIRE PATTON BOGGS

As of January 1:

- **California** – California Consumer Privacy Act (CCPA) and Consumer Privacy Rights and Enforcement Act (CPRA) (CA Civ Code § 1798.100 et seq)
- **Colorado** – Colorado Privacy Act (Colo Rev Statute § 6-1-1301)
- **Connecticut** – Act Concerning Personal Data Privacy and Online Monitoring (Public Act No. 22-15)
- **Virginia** – Virginia Consumer Data Protection Act (Chapter 53, § 59.1-575 et seq)
- **Utah** – Utah Consumer Privacy Act (S.B. 227)

Passed since January 1: Iowa, Indiana, Tennessee, Florida, Montana

EU Regulatory Landscape

European Union

SQUIRE PATTON BOGGS

Different EU legal regimes must be observed in the field of AI

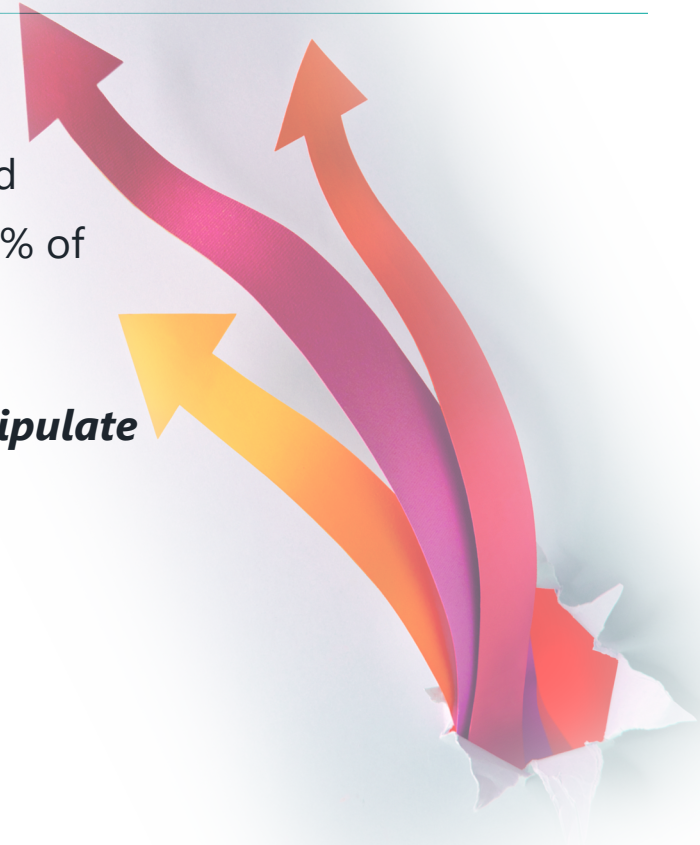
- Upcoming AI Law
  - AI Regulation
  - AI Liability Directive
- Data Protection Law
- Copyright Law (Database Directive)
- Cybersecurity Law
  - (upcoming legislation such as NIS2 Directive)
- Liability Law
  - (draft Product Liability Directive)

Draft EU AI Regulation

SQUIRE PATTON BOGGS

Draft from April 2021

- Not unlikely that it will enter into force in **2023**
- Would be the **first** specific legislation on AI in the world
- Sets **extremely high fines** of up to EUR 30 million or 6% of annual turnover (Art. 71)
- Introduces a **broad definition of AI systems:**
  - Art. 1 lit. c: ***"…AI systems used to generate or manipulate image, audio or video content"***
- Takes a **risk-based approach**:
  1) unacceptable risk
  2) high risk
  3) low or minimal risk



Draft EU AI Regulation

SQUIRE PATTON BOGGS

"Users of an AI system that generates or manipulates image, audio or video content that appreciably resembles existing persons, objects, places or other entities or events and would falsely appear to a person to be authentic or truthful ('deep fake'), ***shall disclose that the content has been artificially generated or manipulated****."*

- Article 52, paragraph 3

Draft EU AI Liability Directive

SQUIRE PATTON BOGGS

Draft from September 2022

- ✓ Introduces the **same broad definition** of AI systems as the AI Regulation
- ✓ Would be the first specific regulation of **harm** (life, health, property, privacy, etc.) caused by AI systems, not just high-risk AI systems
- ✓ People who suffered from the use of AI (individuals, companies, organizations) would have to be **compensated** in the same way as under normal circumstances
- ✓ Covers fundamental rights violations

Art. 3 par. 1: "'…artificial intelligence system' […] means software that […] can generate outputs such as content, predictions, recommendations, or decisions influencing the environments they interact with…"

Harm:
Life, health, property, privacy, etc.

EU Product Liability

SQUIRE PATTON BOGGS

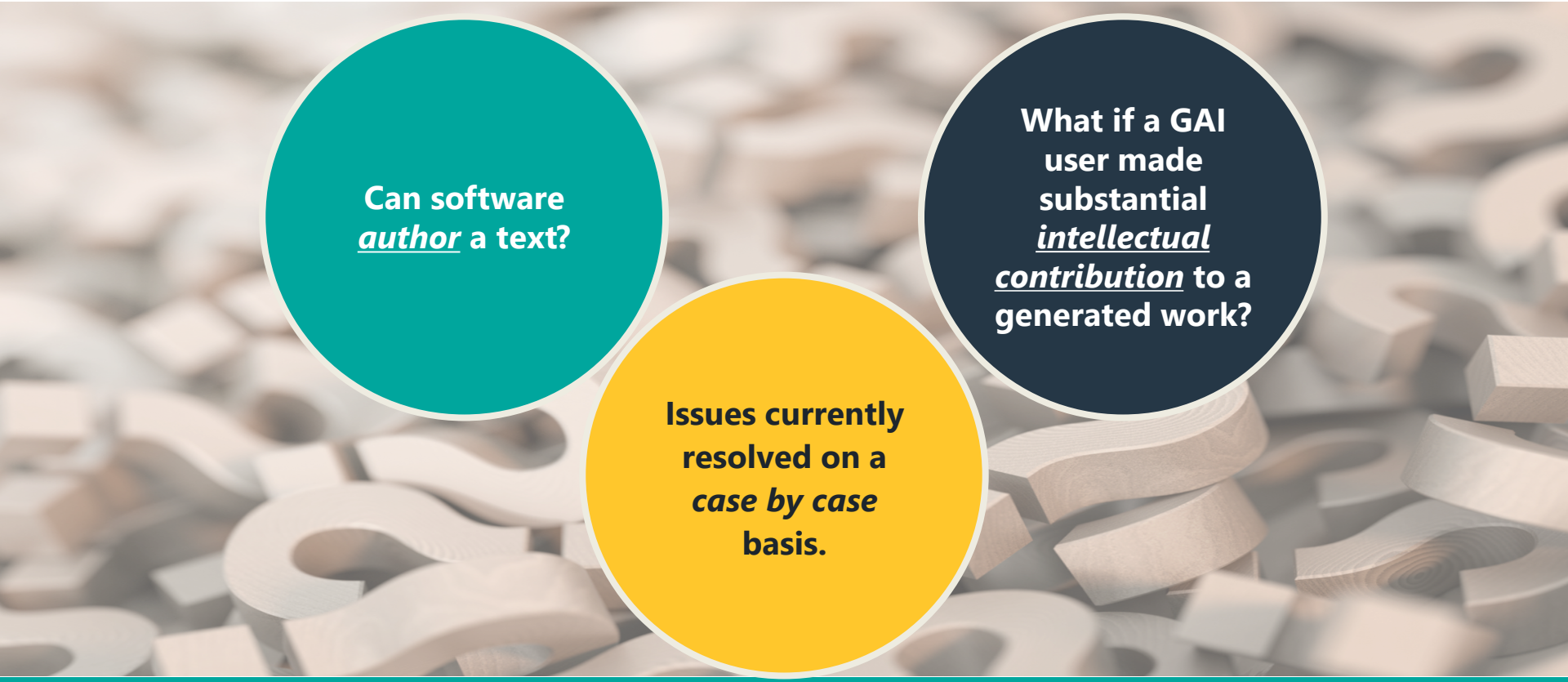
The current Product Liability Directive, applies to damage caused by death or by personal injuries or to private property in a rather “traditional” way.

vs.

The upcoming Product Liability Directive has been specifically drafted to speed up with the digital age, introducing liability for AI systems.

- ✓ **Draft from September 2022**
- ✓ **Applies to psychological damage and data loss**
- ✓ **Manufacturers may be required to disclose evidence**
- ✓ **Plaintiffs' burden of proof is eased**
- ✓ **Does not cover fundamental rights violations (unlike the AI Liability Directive)**

EU/German Copyright Law



EU Concerns about GAI

March 20, 2023
ChatGPT data security incident exposed user chat history and payment-related information.

March 31, 2023
Italian DPA (Garante) is first in EU to (temporarily) ban ChatGPT while investigating OpenAI's compliance with GDPR.

April 3, 2023
UK Information Commissioner Office (ICO) initiates inquiry into ChatGPT's data practices under the UK GDPR.

April 12, 2023
Garante provided OpenAI with set of data protection requirements with which it must comply by April 30, 2023 in order to lift ban.

April 13, 2023
EU Data Protection Board announced dedicated task force to coordinate ChatGPT-focused enforcement across member states.

April 13, 2023
Spanish DPA announced investigation of ChatGPT/ OpenAI data processing practices.

April 20, 2023
The LfDI Baden-Württemberg requested information on ChatGPT's data processing practices in accordance with Article 55(1) of GDPR.

April 28, 2023
Italian DPA (Garante) authorises reinstatement of ChatGPT for Italian users based on OpenAI's compliance steps.

May 11, 2023
Proposed EU AI Act to require "generative foundation models" (GAI) to have additional transparency requirements (e.g., design to prevent illegal content; publish copyrighted training data)

May 16, 2023
CNIL publishes an action plan for GAI deployment "that respect the privacy of individuals."

June 7, 2023
ChatGPT faces investigation in Netherlands over use of data for training algorithm

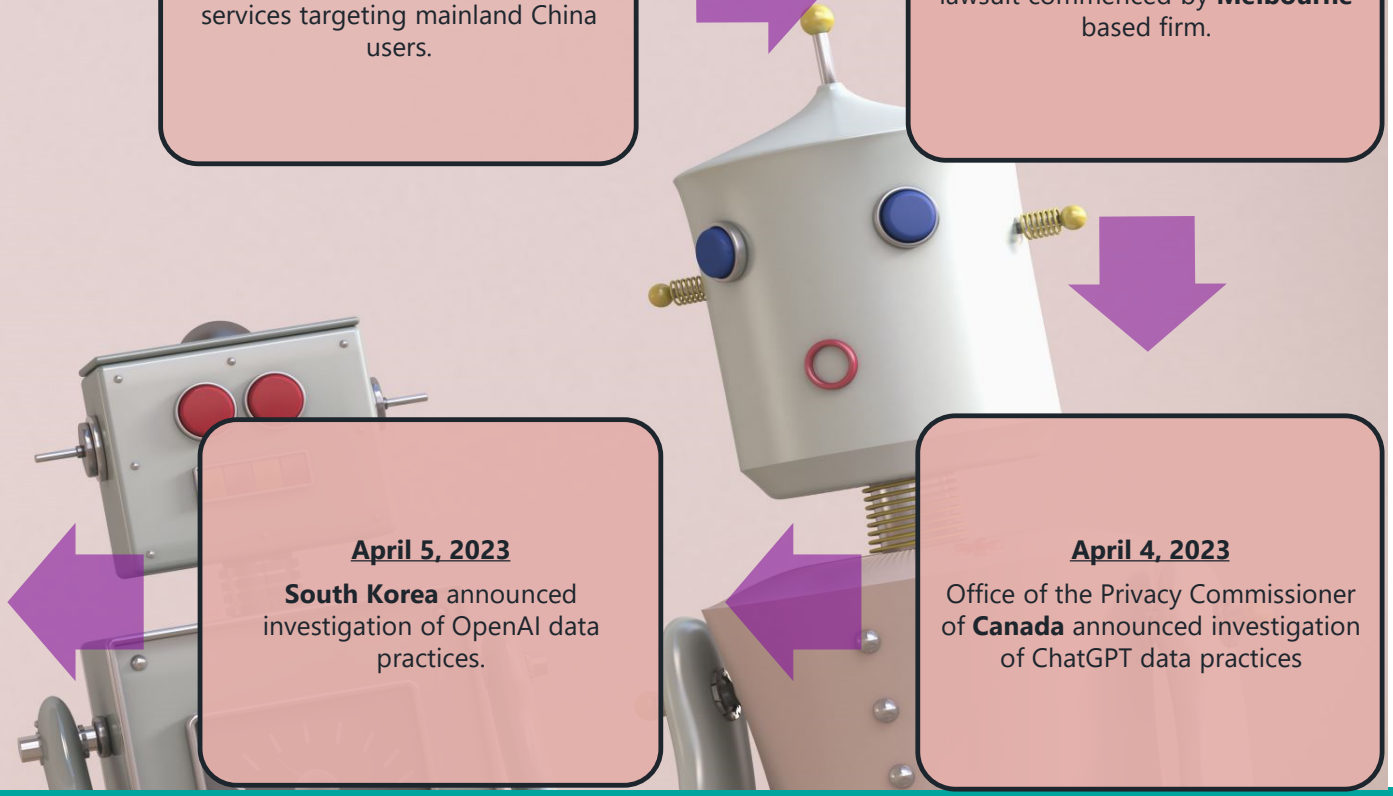
Some of the Global GAI Activity

February 2023

China levied explicit bans on WeChat hosting proxy ChatGPT services targeting mainland China users.

March 21, 2023

OpenAI faces first defamation lawsuit commenced by **Melbourne** based firm.



May 25, 2023

New Zealand Privacy Commission Statement on updated guidelines on generative AI using personal information

April 5, 2023

South Korea announced investigation of OpenAI data practices.

April 4, 2023

Office of the Privacy Commissioner of **Canada** announced investigation of ChatGPT data practices

Key Takeaways for GAI

Common Principles for Responsible AI

SQUIRE PATTON BOGGS

☑	**Ethical Purpose**	**"beneficial intelligence" – do not harm**
☑	**Accountability**	**AI developers and providers are accountable for acts and omissions of the AI system**
☑	**Transparency and Explainability**	**use of the AI system is transparent and decision outcomes are explainable to the people who are affected**
☑	**Fairness & Non-discrimination**	**AI developers, providers and users ensure that fairness and non-discrimination are safeguarded in AI system use**
☑	**Privacy**	**AI system is compliant with privacy norms and laws**
☑	**Safety and Reliability**	**Humans are protected from exposure to harm from AI system use and the AI system is error-free**

Key Takeaways: Governance

SQUIRE PATTON BOGGS

- **Evaluate whether and which AI/GAI laws and other laws apply**
- **Establish a policy (what to do) and procedure (how to do it) for assessing and monitoring GAI use and for training users on lawful GAI use**
  - Know the inputs to and outputs of the GAI system and how the AI system works (as much as possible)
  - Determine whether the 'data in' does or could infringe third party rights
  - Assess whether the transfer of content ownership possible with GAI
  - Require careful contracting
  - Document the risk decision-making process
- **Also, <u>for EU</u>: consult and/or enter into new agreements with works councils / trade unions**
- **Stay up to date on legal and reptuational developments (or appoint someone to):**
  - Managing risk in an uncertain regulatory and technological environment requires a top-down *and* bottom-up compliance approach

Key Takeaways: Privacy

SQUIRE PATTON BOGGS

- **Privacy and Data Protection**
  - Transparency about processing
  - Lawful Basis (GDPR) – challenge of consent; validity of legitimate interest
  - Personal information used to train algorithms
    - Challenge of honoring access, object to/restrict processing, erasure, profiling opt-outs (U.S. state laws)
    - Complying with minimization and purpose limitation requirements
    - Risk of reidentification of anonymized data
  - Data subject / consumer rights
    - Challenge of honoring access, object to/restrict processing, erasure, profiling opt-outs (US state laws)
- **Cybersecurity and Data Breach**
  - Big data sets are attractive targets for fraudsters

Questions?

ALAN FRIEL
Partner & Chair, Global Data Practice
Alan.Friel@squirepb.com

ANNETTE DEMMEL
Partner, Global Data Practice (*Berlin*)
Annette.Demmel@squirepb.com

JULIA JACOBSON
Partner, Global Data Practice (*New York*)
Julia.Jacobson@squirepb.com

Created Using DALL-E