# Survey of the Generative AI Landscape

## What is generative AI (GenAI)?

GenAI can be described by how it operates:

▶ Takes input from the user (called a **Prompt**).

Examples include:

"Review the following text. Tell me if there are any grammatical mistakes and how I can make the tone happy. Also, write a concluding paragraph for me."

"Create lyrics, similar to one of Taylor Swift's songs, about how great dogs are."

"Create an image of a lion with wings in a garden."

"Write code for me in the Python language that accomplishes the following..."

▶ The GenAI, in response, produces content (the **Output**) such as text, audio, images, video, synthetic data and other material based on data it was trained on. The kind of content it can produce depends on the functionality of the GenAI. Some GenAI, for example, only produce text.

It is important to note that GenAI is trained based on existing content or data. This data is often from sources unknown to the user. Sometimes, the GenAI will also use the user's input to further train and improve itself.

## Benefits of GenAI to businesses:

Some benefits of using GenAI include:

**Efficiency.** For example, GenAI can be used to create marketing material such as copy or a description for advertising a particular product.

**Assists in the research and design process.** For example, GenAI can produce test cases for testing software.

**Feedback and revisions.** GenAI can revise text to better convey a certain tone (e.g. excitement).

**Learning.** GenAI can provide instructions or be used for learning. For example, you can instruct the GenAI to guide you through certain programming problems and to provide an explanation, including examples.

## Risks of GenAI to businesses:

Some of the legal risks associated with using GenAI include:

**Loss of proprietary information.** Some GenAI learn from the user's Prompts, which may be used in Output for other users in the future. If a user inputs confidential, proprietary or sensitive information into the GenAI and it learns from the user's input, there is a risk that the GenAI might reproduce the information (or part of it) for a different user.

**Data storage.** Information entered into the GenAI may be stored outside of the user's control and perhaps overseas or with third parties. As a result of concerns relating to data storage and loss of proprietary information, Samsung, Amazon and other companies have implemented policies restricting the kind of information that their employees can enter into certain GenAI.

**Intellectual property.**

a. **Copyright.** Since GenAI is iterative, its Output may be the same as or similar to data it was previously trained on. Moreover, it may reproduce the same or similar content for different users. This could result in claims of copyright infringement.

b. **Authorship/inventor.** The law is still under development in Canada and is currently unclear as to whether a person can be an author of AI-generated works where they have simply entered prompts into the GenAI. Around the world, questions have been raised whether GenAI can be an inventor under patent law.

**Misinformation.** Output from GenAI may be based on inaccurate data or information. The Output may also be incomplete. Relying on the Output could lead to misinformation or disinformation.

**Other risks.** Other risks include bias and vulnerabilities relating to cybersecurity and intentional attacks on the AI (e.g. poisoning).

## Precautionary/preventative measures:

You can reduce your business's exposure to risk by implementing policies, oversight and safeguards. Examples of this could include:

**Policies.** Having policies in place that provide guidelines on when GenAI can or can't be used, and organizing a committee or designating a person for approving any other uses or for answering further questions.

**Due diligence.** Conducting due diligence on the GenAI technology before implementing it into the workplace. Examples include algorithmic audits, choosing open-ended or close-ended GenAI, reviewing and understanding the applicable terms and conditions, etc.

**AI explainability statements.** Adding transparency and informing the public how and when AI is used can help your business create more trust, and may also help you comply with any relevant legislation.

**Contractual provisions.** If you are obtaining a service from another entity, you may wish to include contractual provisions regarding the use of GenAI. The contract can be structured to have appropriate representations, warranties, indemnities and covenants.

**GenAI training for employees.** Train your employees and staff on the responsible use of GenAI and educate them on the framework or policies established by your organization.

The members of our technology, intellectual property and privacy team are happy to provide further information and work with your team to address your GenAI (or AI) concerns. Contact Danielle Graff at dgraff@mltaikins.com, or Nicolas Joubert at njoubert@mltaikins.com for more information.