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Artificial Intelligence Licensing

Companies increasingly use artificial intelligence (AI) to realize competitive advantages in many industries and within various technologies. However, companies seeking to implement an AI solution should first address unique AI licensing issues. Practical Law asked *Rebecca S. Eisner* of *Mayer Brown LLP* for her insights on AI licensing, including best practices when entering into AI license agreements and how to prepare for future developments in this area.



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What is AI and how does it work?

AI generally refers to computer software or algorithms that can perform tasks normally performed by humans. AI also includes:

- Machine learning.
- Deep learning. This is a subset of machine learning that involves more complex neural networks.
- Robotics process automation (also known as the use of bots). Bots complete routine and repetitive tasks through automation and do not typically include machine learning.

Machine learning starts with an algorithm or a computer code (the AI solution). The AI licensee (user) provides data to the AI solution to produce an outcome. The data can be:

- **Labeled training data with instructions to train the AI solution to produce a certain outcome.** This is referred to as supervised learning.
- **Unlabeled training data without any instructions.** This allows the AI solution to determine patterns and correlations that, when applied to data, produce an outcome. This is referred to as unsupervised learning.

For example, if a user wants an AI solution to recognize and distinguish cars from trucks using supervised learning, the user labels the training data and allows the AI solution to process and sort the data into categories. The output hopefully produces the desired outcome, which is the ability to distinguish between cars and trucks.

With unsupervised learning, the user simply enters training data containing images of vehicles into the AI solution, and the algorithm determines patterns and correlations that may or may not produce results that distinguish between cars and trucks.

What are some of the key challenges regarding the use of AI?

While the uses and benefits of AI are exponentially increasing, there are challenges for companies seeking to harness this new technological advancement. Chief among the challenges are:

- The ethical use of AI.
- Legal compliance regarding AI and the data that fuels AI.
- Protection of intellectual property (IP) rights and the appropriate allocation of ownership and use rights in the components of AI.

Companies also need to determine whether to build AI themselves or license it from others.

How is AI licensing different from traditional software or technology licensing?

Many of the terms and conditions in an AI license agreement are the same as in any traditional software or technology license agreement. However, AI licensing presents several unique issues and requires counsel to identify and address key AI components, unlike in traditional software or technology licensing. These components include:

- **The AI solution.** This is the tool used to produce the desired outcome, whether a machine learning algorithm or a deeper neural network.
- **Training data.** This is the data set used to train the AI solution along with the instructions.
- **Production data.** This is the data set entered in the AI solution to produce the AI output.

- **The AI output.** This is the outcome after the production data is entered into the AI solution.
- **AI evolutions.** These are iterations of the AI solution that evolve during training and subsequent uses.

For each AI component, it is essential to consider:

- Who provides the component.
- Who will use the component.
- How the component will be used.
- Who owns the component.

These considerations should guide counsel in establishing the terms and conditions in the AI license agreement.

Depending on the AI arrangement, the AI licensor (provider) may provide a license to software or grant access to cloud services containing the AI. References to AI licensing, therefore, typically include:

- An on-premises license of AI, where the user installs, trains, and operates the AI solution.
- A subscription to Software as a Service (SaaS) or other cloud services the provider offers, where the user accesses the AI solution in the cloud through the internet, and the provider often trains the AI solution.



Search [Software License Agreements](#), [Software as a Service \(SaaS\) Agreements](#), and [Infrastructure as a Service \(IaaS\) and Platform as a Service \(PaaS\) Agreements](#) for more on software licensing, SaaS, and other cloud services.

What are the key issues impacting providers and users entering into AI license agreements?

Several unique issues impact AI license agreements. In particular, providers and users entering into these agreements should address:

- IP ownership and use rights.
- IP infringement.
- Warranties, specifically performance promises.
- Legal compliance.

How does the AI model impact IP ownership and use rights?

US IP laws simply have not caught up to AI yet. While aspects of AI components may be protectable under patents, copyrights, and trade secrets, US IP laws primarily protect human creativity. Because of the focus on human creation, issues may arise under US IP laws if the AI output is created by the AI solution instead of a human creator.

Because US IP laws do not squarely cover AI, as between an AI provider and user, contractual terms are the best way to attempt to gain the benefits of IP protections in AI license agreements. For example, the parties could:

Artificial Intelligence Toolkit

The Artificial Intelligence Toolkit available on Practical Law offers a collection of resources to assist counsel in identifying potential legal issues concerning artificial intelligence. It features a range of continuously maintained resources, including:

- [Artificial Intelligence Key Legal Issues: Overview](#)
- [Artificial Intelligence \(AI\) in the Workplace](#)
- [Artificial Intelligence and Tort Liability: The Evolving Landscape](#)
- [Pricing Algorithms and Collusion](#)
- [Current Trends in AI Regulation](#)
- [Using Artificial Intelligence in Law Departments](#)
- [Artificial Intelligence and Legal Ethics](#)

- Designate certain AI components as trade secrets.
- Protect AI components by:
 - limiting use rights;
 - designating AI components as confidential information in the terms and conditions; and
 - restricting the use of confidential information.
- Include assignment rights in AI evolutions from one party or the other.
- Determine the license and use rights the parties want to establish between the provider and the user for each AI component.
- Clearly articulate rights in the terms and conditions.

Ownership and Use of the AI Solution

The provider typically is the owner of the AI solution and provides a license to the AI solution to the user. The license may include restrictions on use, such as a field of use restriction, territorial limitations, or uses prohibited for risk, legal, or ethical reasons. For example, voice recognition technology may be appropriate for helping customers navigate a voice response unit, but may not be appropriate for analysis to impute IQ scores to pre-screen for employment or confer other benefits.

Ownership and Use of Training Data

The AI agreement must cover which party will:

- Provide and own the training data.
- Prepare and own the training instructions.
- Conduct the training.
- Revise the algorithms during the training process and own the resulting AI evolutions.

As for data ownership, the parties should identify the source of the data and ensure that data use complies with applicable laws and any third-party data provider requirements.

Ownership and Use of Production Data

Once the AI solution has been trained and is ready for production, production data will fuel the AI solution to produce AI output. It is important to set out in the terms

and conditions which party provides and which party owns the production data that will be used.

If the AI solution is licensed to the user on-premises (the user is running the AI solution in the user's systems and environment), it is likely that the user will supply and own the production data. However, if the AI solution is cloud-based, the production data may include the data of other users. In a cloud situation, the user should specify whether the provider may use the user's data for the benefit of the entire AI user group or solely for the user's particular purposes.

Limiting the use of production data to one user with an AI solution may have unintended results. In some AI applications, the use of a broader set of data from multiple users may increase the AI solution's accuracy and proficiency. However, counsel must weigh the benefits of permitting a broader use of data against the legal, compliance, and business considerations a user may have for limiting use of its production data.

Ownership and Use of AI Output

Most users expect to own their AI output. If the AI solution is cloud-based, there often is a term in cloud agreements (particularly public cloud agreements) called customer content. Customer content is typically any information, data, or other content that is submitted to the cloud, and this term may be expanded to cover any of the AI components, including the AI output the user provides or generates.

However, the parties should carefully consider whether labeling AI output as customer content will produce any unintended results under the agreement structure. For example, cloud agreements often require the user to agree that it has all rights to provide the customer content, but this statement may not be an appropriate undertaking by a user where, for example, the provider has trained the AI.

With AI output, as with production data and training data, the user should carefully consider whether to grant use rights to the provider. The user should be aware of privacy, data protection, and third-party restrictions that may exist in its agreements with other parties that could limit the use of the production data, training data, or AI output.

Ownership and Use of AI Evolutions

If the AI solution is static (not constantly changing and iterating), the provider typically owns any changes to the AI solution. A static AI solution is similar to software because the solution does not change, and users use the solution as developed and presented by the provider.

However, many AI solutions are not static and undergo evolutions through the use process.

When two or more parties contribute to AI evolutions, the license agreement should appoint a contractual owner. The parties must then determine who will own AI evolutions or whether AI evolutions will be jointly owned, which presents additional practical challenges. (For more information, search [Intellectual Property: Joint Ownership](#) on Practical Law.)

If the AI solution is cloud-based and the cloud user will not own the AI evolutions, then the user should include in the AI license agreement the right to use the most recently trained version of the solution.

How does the AI model impact the IP infringement provisions?

Typical exceptions to the IP infringement indemnity in traditional software or technology licensing agreements include that the provider will not indemnify for:

- Modifications to the software or technology.
- Unauthorized combination of the software or technology with other software or technology.
- Use of the software or technology beyond the scope authorized in the agreement.

For AI licensing, these exceptions do not work well because modifications and combinations occur with AI. A user that blindly agrees to these exceptions may find itself without any IP infringement protection. For example, the AI solution:

- Must be trained, which means modifications to the AI solution.
- Must be combined with training data and production data.
- May evolve and exceed a pre-determined authorized scope over time.

There is no one-size-fits-all license solution to this challenging complication. Allocation of IP infringement risks should be based on the essential considerations listed above for each AI component.

For example, if the user will train an AI solution by entering its own training and production data in the AI solution to produce an outcome, the provider likely will not provide an infringement indemnity that covers all of the AI solution components. The provider may be willing to provide an infringement indemnity for the initial AI solution because that is the only component the provider controls in this example.

How does the AI model impact a performance warranty?

One of the most common warranties in traditional software and technology licensing agreements is

a performance warranty that the software or the technology will perform in accordance with the documentation or the specifications. With AI, it is problematic to tie a performance warranty to the documentation or specifications because AI constantly evolves. The AI solution may drift from the initial documentation or specifications, reducing the value of a traditional performance warranty over time.

Instead of tying the performance warranty to the documentation or specifications, AI providers and users may consider tying warranties to desired outcomes the parties intend to achieve through the use of the AI. However, not all outcomes are easily definable, and they may not be fit for the desired purpose at all if improperly defined.

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For example, a Chinese traffic monitoring system used facial recognition technology to identify violators and issued a traffic violation to a prominent executive who was not present at the given location when the system registered the violation. Instead, a bus bearing an ad with the executive's likeness was present, and that caused the system to register a violation and ascribe it to the executive. This AI system would satisfy an outcome defined as a "facial recognition system that accurately

correlates images to the most likely human,” but would fail to satisfy the real-world practical desired purpose of the traffic monitoring system.

How does the AI model impact legal compliance?

The use of AI presents ethical issues. Companies must:

- Consider how they will use AI.
- Define principles and implement policies regarding the ethical use of AI.

AI is different from many other technologies because AI can produce legal harm against people and some of that legal harm might not only violate ethical norms, but also be actionable under law.

One AI ethical use consideration is legal compliance, which is more challenging for AI than for traditional software or technology licensing. AI-based decisions must satisfy the same laws and regulations that apply to human decisions. AI is different from many other technologies because AI can produce legal harm against people and some of that legal harm might not only violate ethical norms, but also be actionable under law. Before entering into an AI license agreement, the user should address legal compliance concerns with the provider and determine which party is responsible for compliance.

Best practices to address legal compliance issues in AI licensing include:

- Conducting diligence on the AI solution to determine if there are any legal or regulatory risk areas that merit further inquiry.
- Allocating responsibility for legal and regulatory compliance according to the AI components and based on the essential considerations listed above for each AI component.
- Developing AI policies and involving the various stakeholders in the policy-making process to ensure thoughtful consideration of when and in what contexts AI use is appropriate.
- Implementing a risk management framework that includes a system of ongoing monitoring and controls related to AI use.
- Considering which party should obtain third-party consents for data use due to potential privacy and data security issues.

What do you see as horizon issues for AI licensing?

AI is transforming our world rapidly and without much oversight. Developers are free to innovate, as well as to create tremendous risk. The horizon line for AI is much closer than many think. Very soon leading nations will need to establish treaties and global standards for the use of AI, not unlike current discussions about climate change.

Governments will need to both:

- Establish laws and regulations that protect ethical and productive uses of AI.
- Prohibit unethical, immoral, harmful, and unacceptable uses of AI.

These laws and regulations should address some of the IP ownership, use rights, and protection issues discussed above. However, these commercial considerations are secondary to the overarching issues concerning the ethical and moral use of AI. In line with the increased attention on corporate responsibility issues, including diversity, sustainability, and responsibility to more than just investors, companies need policies and guidance against which to assess their development and use of AI. These policies and guidance are worthy of board-level attention. Technology attorneys who assist clients with AI issues should monitor developments in these areas and, wherever possible, act as facilitators and leaders of thoughtful discussions regarding AI.



Search [Artificial Intelligence Key Legal Issues: Overview](#) and [Current Trends in AI Regulation](#) for more on legal and regulatory issues relating to AI.