

The background of the page is a solid blue color. In the upper half, there is a large, semi-transparent sphere. Below the sphere, there are several horizontal, wavy lines that create a sense of depth and movement. At the bottom of the page, there are two sets of horizontal lines, one on the left and one on the right, which appear to be part of a stylized graphic or logo.

# Intellectual Property Strategy Foundations for Artificial Intelligence

A Practical Guide for Founders,  
Leaders and Investors

**SCALE|AI**

AI models, algorithms, code, methods, and proprietary data are valuable intellectual property (IP) assets. Incorporating “IP thinking” into your AI business strategy can significantly enhance the effectiveness of these assets, fostering business growth by anticipating opportunities and threats.

However, an effective IP strategy must be built on a **solid foundation**. Six essential steps are required to establish that robust foundation in AI. While many believe that proper IP management is costly and complex, this guide will concretely dispel both misconceptions.

# A. Why Intellectual Property?

AI businesses are inherently built upon their IP.

IP assets form the core of an AI business: the distinctive ideas, information, and data that set you apart from competitors and others in the market.

They embody your business's identity and serves as the essential 'natural resource' propelling your growth.

## Why IP Strategy?

Effectively leveraging your IP is the key to unlocking your business's full potential.

An IP strategy is just the component of your business strategy where you *anticipate opportunities and potential threats* to your IP, and how to proactively respond.

It's not rocket science: having a map is vital for reaching your destination. To get the most out of your IP, you need an objective and a plan. That's precisely the purpose of an IP strategy.

### STAY ENGAGED!

The term "IP Strategy" combines two critical concepts: *IP and strategy*. The strategy focus is on your business, and - as the undisputed expert in your business - your involvement is essential to steer IP decisions effectively. Strong IP strategies are distinguished by how well they align with business considerations and realities. IP specialists can assist, but *your active participation* is crucial.

## IP = Ideas, Information & Data?

Your IP comprises the distinctive ideas, information and data that set you apart from competitors and others in the market.

- Ideas, such as innovative product concepts, use cases, business models, go-to-market strategies, pricing strategies.
- Information, such as software code, algorithmic improvements, AI models, architectures, platforms, data pipelines, tools, methods, know-how.
- Data, such as training data, parameters, hyperparameters and feature data.

**“The strategy focus is on your business, meaning your involvement is essential to steer IP decisions effectively.”**

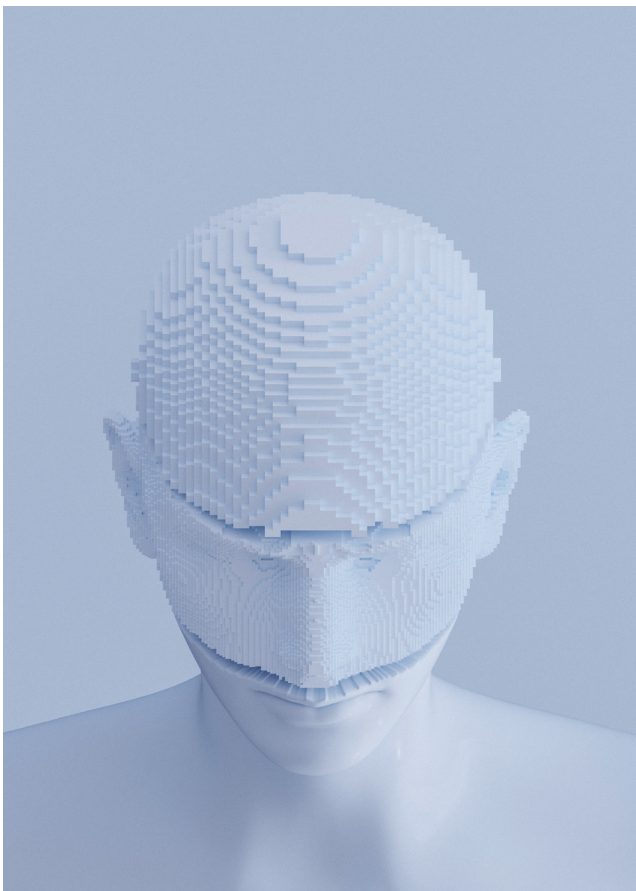
## IP TOOLS AND IP RIGHTS

Optimizing the **business impact of your IP** requires a range of tools and legal rights, such as safeguarding trade secrets, securing trademarks and patents, harnessing open source (copyright), and more. **Remember:** *IP is the core asset, while trade secrets, patents, etc. are the tools and rights through which we can leverage the IP assets.*

In essence, your IP strategy is a plan for how and when you will use these tools and rights for maximizing the business advantages derived from your IP.

## A STRONG FOUNDATION

Building an effective IP strategy is akin to constructing a building – it starts with a solid foundation. This groundwork paves the way for more advanced measures down the line. Starting from the ground up, prioritizing fundamental aspects of your IP strategy first, helps foster longer-term success and resilience for your business.



## Destination or Journey?

- Your IP evolves as your business grows, meaning your strategy must also adapt. Therefore, it's vital to understand that an IP strategy is a continuous journey, not a static destination.
- Starting your IP journey may initially feel unfamiliar and you might be unsure about next steps. *This is normal and expected.* Over time, as you regularly engage with “IP thinking”, clarity will gradually emerge around what IP assets you have and how you want to leverage them.
- Therefore, don't expect perfection from the start. The most important thing is to take that initial step and begin your IP journey.

## ONE SIZE DOES NOT FIT ALL

IP strategies are not one-size-fits-all; they vary depending on technology and industry. *What proves effective in one sector may not be applicable in another.* For instance, industries facing reverse-engineering risks, such as technology hardware and pharmaceuticals, rely heavily on patenting to leverage the value of their IP, which is otherwise completely exposed to competitors.

On the other hand, AI presents distinct challenges. Its intricate workings are often hidden from competitors, making reverse-engineering less straightforward. While this offers AI businesses more options for IP strategies, tools like patenting are also less straightforward and require more meticulous planning. These realities underscore the need for an AI-specific approach to IP strategy.

Let's dive in!

**“Building an effective IP strategy is akin to constructing a building – it starts with a solid foundation.”**



# B. A Foundational IP Strategy for AI

While every AI business is unique, there are fundamental steps that all should consider when developing their IP strategy. Here are six essential steps recommended to establish a robust foundation for your IP strategy:

**01** Secure Your Brand Name

**02** Own Your IP

**03** Identify and Safeguard your Secrets (and Data)

**04** Manage Open Source Obligations

**05** Familiarize Yourself with the Patent Landscape

**06** Build on your Solid Foundation

Let's dig deeper into each step:

## Step 1. Secure Your Brand Name.

### WHY?

You've invested significant time choosing the perfect name. Ensuring competitors can't adopt a similar name is crucial, right? This requires a registered trademark.

### HOW DO TRADEMARKS WORK?

A registered trademark grants legal rights nationwide against the adoption of a similar trademark in related business lines. Registration is necessary in each country where protection is desired. Canadian AI companies should usually register in both Canada and the United States. Once registered, you indicate the trademark with ®.

### Did you know?

- Simply registering the name when starting your company does not protect it.
- Only a **registered trademark** safeguards your company name from being adopted by others in a related business line.

## WHAT IS THE PROCESS?

1. **File an application** for your trademark (name/logo) with the help of a registered trademark agent. The application will describe the mark (e.g. including any design, colour, etc.), as well as list the associated class(es) of products and/or services. (Products and services are categorized into standard classes.)

2. **Examination** by a Trademarks Office examiner, to check for existing trademarks that are too similar to yours, and other factors such as whether yours is too descriptive of the products or services. The examiner issues a written assessment, either allowing the registration or requesting certain changes to align with requirements.

## CHOOSING YOUR NAME

A unique name is easier to protect than one that's descriptive or too similar to others. For instance:

- ✓ Zynthello (*made up, and likely dissimilar to others*);
- ✗ Great AI (*too descriptive*).

# Step 2. Own Your IP.

## WHY?

Your company's value is closely linked to the IP it owns. Think of it as **equity** in your business: *what you own versus what others own*.

Ownership of IP grants you the autonomy to use it how you want, without the need for external permissions, royalties, or licensing fees.

## HOW DOES IP OWNERSHIP WORK?

IP is initially owned by its creator. To transfer ownership, a written contract is necessary between the creator and desired owner. For example, employment agreements typically include a transfer of IP ownership from employee to employer.

## WHAT DOES IT COST?

To prepare & file an application for 1 trademark, in 1 country, for 1 product/service class costs about CDN \$2000 – 2500, including agent's fees, plus tax. Compare that to the cost of not protecting your brand and you'll see why, pound-for-pound, this is **one of the best investments** your business will ever make.

## GET STARTED

Expert guidance is essential. Contact a registered trademark agent to discuss your situation. In Canada, visit: <https://ipic.ca/find-an-agent>.

## FINAL THOUGHT

Your name is your identity and how customers recognize you. That makes this your most critical intellectual property. Protect it.

## WHAT IP TO OWN?

You don't need to own all the IP your business uses, but it's vital to own the IP that defines your market differentiation. Investors and potential acquirers will scrutinize your IP ownership, because it significantly impacts your business's value (think "equity").

## Did you know?

- IP ownership does not follow the money! Simply paying for IP does not grant ownership.
- A written contract transferring ownership is required.

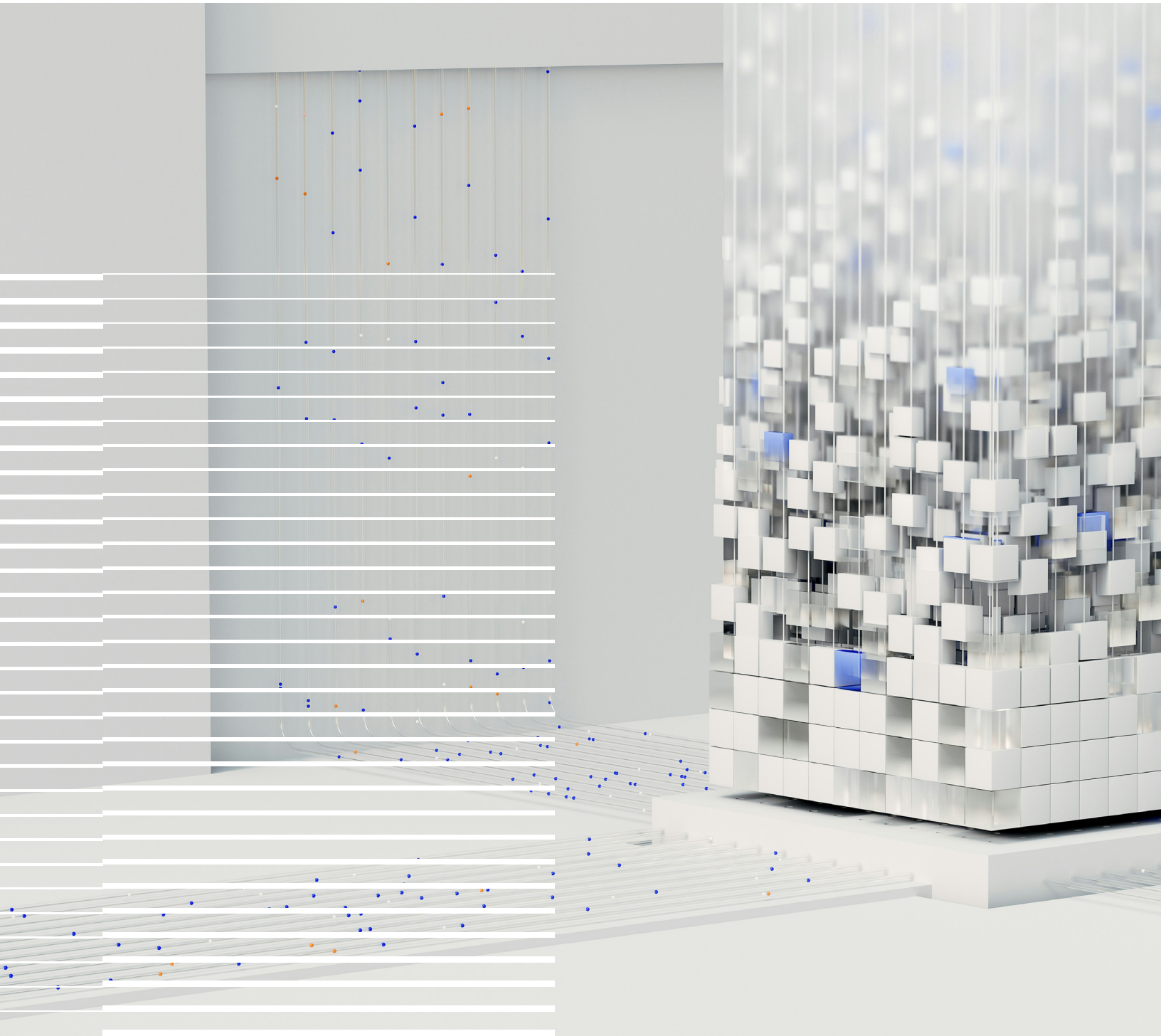
## GET STARTED

Consult with a lawyer to review contracts and establish clear ownership of essential IP. Don't be tempted to rely on borrowed templates that may not be right for you. This is critical for contracts with co-founders, employees, consultants, vendors, collaborators and customers.

## FINAL THOUGHT

You have IP... make sure you truly own it.

**“Owning IP helps create equity value in AI businesses.”**



# Step 3. Identify and Safeguard Your Secrets

## WHY?

Protecting secrets is essential to safeguarding critical IP that differentiates you from competitors. However, this strategy only succeeds if you *actively protect* your secret information. Many AI companies never identify what information they should keep secret, mistakenly believing that simply signing non-disclosure agreements (NDAs) will somehow protect them.

Unfortunately, *legal* safeguards like NDAs offer only **weak protection**, making practical measures like the **need-to-know principle** essential to limit unnecessary disclosure and ensure effective protection for secret information. The best way to protect a secret? *Keep it secret.*

## WHAT TO DO

Silence isn't an option when engaging with customers, vendors, investors, and others. But it's also essential to feel comfortable in these interactions while still ensuring sensitive information remains protected - a skill sometimes akin to "threading the needle."

Here are some strategies to navigate conversations effectively while safeguarding sensitive information:

- Develop a game plan on discussing sensitive topics without revealing secrets.
- Focus on addressing the customer's problems, emphasizing outcomes and benefits (which aligns with their interests, anyway!).
- Concentrate on **what** you will deliver or solve, instead of the technical details on **how** you do it.
- Stay high level and avoid diving into unnecessary technicalities to explain (or impress).
- Limit the discussion scope to what's necessary for decision-making.
- Don't be shy to "black box" certain topics or parts of your product.

Surprisingly most disputes over misuse of secrets actually occur between parties who initially trusted each other, such as customers, vendors, collaborators, or former employees – and even when NDAs were in place. This underscores the importance of applying the need-to-know principle *even with trusted parties, and even when NDAs are in place.*

This doesn't mean skipping NDAs. They remain essential for covering the secret information that you decide you must disclose. However, whether under NDA or where an NDA isn't possible, the following preparation will help you navigate conversations about your product technology.

## Trade Secrets? Confidential Information? Proprietary Information?

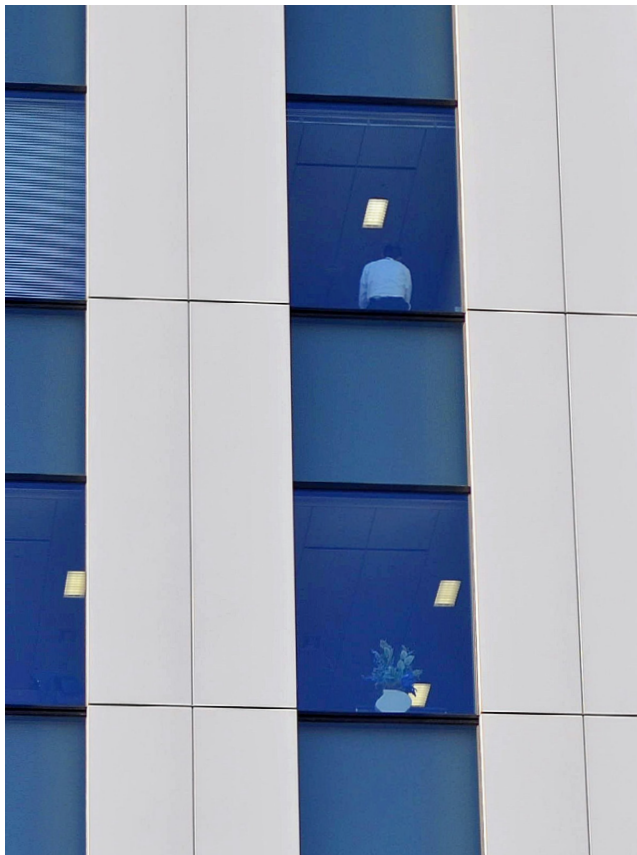
- These different legal terms essentially refer to information that someone wants to protect from unauthorized use and disclosure.
- In everyday business, the legal distinctions between these terms aren't crucial. Simplifying them altogether under the term "secrets" clarifies their meaning and purpose.

**"Many AI companies mistakenly believe that signing NDAs alone is sufficient to safeguard their secret information."**



- Share use cases & success stories to showcase value without getting into the weeds on **how** your product works.
- Use generic descriptions or analogies to describe how your product works (which are easier to understand, anyway).
- Be transparent and respectful about what can be shared, and what is off-limits.
- Be cautious but not fearful. Weigh the value of disclosing versus not, and challenge yourself to find other ways to convey your points. If you're not sure how to answer a sensitive question, take an action to come back with a response at a later time.

**“Protecting AI data involves the same techniques as safeguarding secrets.”**



## Did you know?

- Theft and cyberattack are not the main cause of lost secrets!
- Most secrets are actually lost through unnecessary disclosure and careless handling.

## GET STARTED

To safeguard your secrets, collaborate with your team in advance to determine what you should keep secret, and how best to protect that. For example:

- What sets you apart, provides you an advantage, or needs protecting?
- Who should it be protected from?
- Can some aspects be disclosed without compromising sensitive details?
- How to discuss delicate topics while still protecting the secrets?
- How to make sure secrets aren't included in publications or white papers?
- Develop a game plan for communicating with clients, collaborators and investors, without revealing the crucial details.

## FINAL THOUGHT

Protecting secrets can be powerful...  
but only if you *actually protect them!*

## A word about data

### How to safeguard your data

Patents and copyrights cannot protect data. Protecting proprietary data involves the same techniques as safeguarding secrets:

- disclose proprietary data strictly on a **need-to-know** basis,
- implement **physical controls** like encryption and access controls, and
- ensure **contracts** are in place with anyone receiving or using proprietary data, requiring confidentiality and limiting use.

Collaborations with customers, vendors or partners may lead to new or derived data and other data byproducts. Your contracts should clearly define ownership rights over this data and outline permissible or prohibited uses by each party.

### Training data: OK to use?

The saying “*possession is 9/10ths of the law*” doesn’t always hold true for training data.

Understanding the origin of your training data and the rights or permissions associated with it at the time of acquisition is crucial, because these directly influence your ability to utilize the data for training models or in retrieval augmented generation (RAG). Here are four key considerations:

- **Copyright:** While numerical data is not usually covered by copyright, image, video and sound data are protected. Using copyrighted material without proper authorization for model training or RAG can infringe copyright.
- **Web Scraping:** Websites have legally binding terms of use that may prohibit data scraping, particularly if access controls were bypassed. Scraped data containing personal/health information or copyrighted material presents additional considerations, as well.
- **Personal & Health Information:** Even if consent was obtained for use of this data for non-AI purposes, confirm that such consent would allow AI model training or RAG. For new data collection, ensure consents encompass these potential uses.
- **IoT and Other Proprietary Data:** Data sourced from third-party machines, sensors or systems may require permission or licensing from the data owner for AI use.

While unauthorized use of training data may go undetected by the average user, it can significantly undermine your business’s credibility, impacting valuations during financing or exit negotiations. The origin and rights related to training data are closely examined during due diligence, potentially affecting deal value. Consulting with legal experts on this important matter ensures your business is built on solid ground.

# Step 4. Manage Open Source Obligations

## WHY?

AI development relies heavily on open code, models, and sometimes data. *But this isn't just free stuff.* These resources also come with legal responsibilities that demand your attention.

Who will notice if you overlook this? Investors and acquirers will inquire during pre-deal due diligence. It might even affect deal value. The attention you give to this is also a sign of your business maturity.

## HOW DOES IT WORK?

Most open resources (e.g. code, models, data) are still protected by copyright, patents and/or other proprietary measures. Your permission to use them is conditional on certain restrictions or license conditions.

## WHAT ARE THE LEGAL OBLIGATIONS?

Certain open source licenses require you to also publish your code (known as “copyleft” licenses), while others only require attribution (known as “permissive” licenses). Some licenses may have use-based restrictions, such as limited to research-only or prohibiting certain use cases.

Ensure that the legal obligations of the open source you want to use aligns with your product or business strategy before you decide to use it.

**“The attention an AI business gives to managing open source is also a sign of its maturity.”**

## Did you know?

→ Whether you click “*I accept*” during sign-in or sign-up, or open source obligations are in a license accompanying the code or model in the repository, the obligations are legally-binding and you must take them seriously.

## GET STARTED

Follow this basic plan to effectively manage your open source obligations:

- **Review** the legal terms and licenses of the models, code bases and data that you currently use. Seek legal guidance if necessary. It's important to get this right.
- **Identify** any obligations that conflict with your product or business strategy, such as requirements to publish your proprietary code or restrictions on desired use cases.
- **Make** any changes needed to replace problematic resources with alternatives that align better with your strategy.
- **Moving** forward, assess the legal obligations of new models, code bases, or data before adopting them, to maintain consistency with your product or business strategy.
- **Keep a record** of the open source resources you use, where, and their associated obligations.

## FINAL THOUGHT

Some say “*open source is free, like a puppy is free*”: there are still important obligations and responsibilities to manage!

# Step 5. Familiarize Yourself With the Patent Landscape

## WHY?

You cannot ignore other people's patents, even if you decide not to file your own. Being aware of patents relevant to your business is crucial for understanding the playing field, especially for:

- Identifying patents your product should avoid;
- Gaining insight into others' activity in the space;
- Uncovering possible collaboration partners;
- Building investor confidence in your market awareness, strategic thinking and risk mitigation approach;
- Evaluating whether patent filing aligns with your strategy; and
- Determining types of patents that could suit your strategy.

Understanding your patent environment just makes sense. While some IP service providers may offer detailed patent landscape analyses, these may be too broad and lack the focused insights you need. Conducting your own keyword search, especially refining it with information about your known competitors, can be a valuable first step towards gaining insight into your patent landscape.

## HOW DO PATENTS WORK?

Patents and patent applications contain a full description of the invention, including figures. This allows you to gather valuable competitive intelligence from others' patents.

However, it's important to note that the legal scope of the patent is **defined by the claims**, not the description and figures. The claims are a set of numbered paragraphs located at the end of the patent document.

## THE LIFECYCLE OF A PATENT

Applications are initially kept secret, and only published 18 months after the filing date. This means that discovering recently-filed patents is impossible until their publication - patent searching is always inherently 18 months out-of-date. However, because new patents are continually filed and eventually published, it's important to **regularly update** your searching.

Search websites contain published applications and granted patents. The two can look similar, with the only difference being in the claims (the patent examiner often requires the claim scope to be narrowed during the examination process). Read the search record carefully to know which is which.

Patent applications are not effective until granted by the patent office. Granted patents are effective for up to 20 years after the patent filing date.

## Did you know?

- You can think of the patent **claims** like a **recipe** for the patented invention.
- Patent "infringement" occurs when someone uses **all** of the elements of at least one patent claim (similar to following a recipe) without the permission of the patent owner.

## GET STARTED

Free online search tools help you discover patents in your field. One highly recommended tool is **Espacenet** (<https://worldwide.espacenet.com/>).

If you have questions about patents found in your search, consult a registered patent agent. In Canada, visit: <https://ipic.ca/find-an-agent>.

While Google offers a useful patent search tool, if Google is or could become your competitor, it's wise to explore alternatives, like **Espacenet**, which is operated by the European Patent Office.

## FINAL THOUGHT

You cannot ignore other people's patents – so don't.



# C. Next Steps: Build on Your Foundation (Step 6)

Having established a solid IP foundation in Steps 1-5, you're now ready to consider adding more sophistication, if that seems right for your business. Remember the wisdom of "Walk Before You Run": starting with a strong foundation will ensure sturdy support for your subsequent IP initiatives.

Consider the following steps to amplify the business impact of your IP:

## FILING PATENTS

Many still associate patents with legal battles, yet less than 1% of patents end up in court. Were the other 99% of patents worthless?

Absolutely not! *Well-planned* patents can serve vital needs for AI businesses, aiding in securing financing, attracting partnerships or acquisitions, and enhancing their public image and technological reputation.

While sectors like technology hardware or pharma find patenting straightforward - covering physical products they release to the market - AI's realities demand more careful planning and a nuanced approach. **In AI, the reasons behind seeking a patent greatly influence what's needed in the patent to achieve those goals.** A "well-planned" patent is simply one that is supported by a carefully crafted strategy. *Stay tuned for Scale AI's upcoming Practical Guide to Patents in Artificial Intelligence!*

## RELEASING YOUR OWN OPEN SOURCE

Releasing open source goes beyond altruism; it's a strategic move that leverages IP for business gains. There are many effective strategies for driving adoption, traction, and community engagement through open source. Moreover, open source can serve as a marketing and branding tool, showcasing your expertise and innovation while attracting talent. It can also help differentiate your offerings in a competitive

## How should I document my IP strategy?

→ There's no magic formula, but it is crucial to document your strategy for:

- Regular review, evaluation, and improvement;
- Discussion with your IP advisor;
- Communication to employees; and
- High-level communication to investors.

But it's not just for display; it's a dynamic document, much like your other business plans. The more you integrate your IP strategy into your regular business plans, the more "IP thinking" becomes ingrained in your business.

market. Speaking of competitors, the choice of license for your open source can also be quite strategic, maximizing user benefits while limiting the advantages your open source provides to competitors. For AI companies, releasing open source has become a potent IP tool available in their strategy toolbox for supporting specific business models.

## EXPANDED BRAND STRATEGY

Expanding your brand strategy to include additional brand names, logos, and families of marks can significantly amplify your market influence. Consider the impact of OpenAI's *ChatGPT* trademark amidst the rise of large language models (LLMs). Despite AI's technological strides, the decisions of its human users are still heavily influenced by effective branding strategies. As your business grows, ensure that your IP strategy evolves to encompass your technology and your approach to branding.

## SEEK PROFESSIONAL GUIDANCE

Even if you're inclined to handle things yourself, expert IP guidance is essential at key points along your IP journey. Seek recommendations from fellow founders, peers, and colleagues to find an IP professional who has experience working with startups/SMEs and is suited to your technology and business approach. Many professionals offer a brief, complimentary initial consultation that can help you assess their suitability. However, keep in mind that effective IP guidance requires a deeper understanding of your technology and business strategy, more than can be gleaned in a brief initial meeting. *If something is free, remember the maxim: you always get what you paid for.*

Financial support for developing your IP strategy is accessible through government programs like the National Research Council's IRAP IP Assist Program (<https://nrc.canada.ca/en/support-technology-innovation/nrc-irap-support-intellectual-property>), Elevate IP (<https://ised-isde.canada.ca/site/elevateip/en>) and IP Ontario (<https://www.ip-ontario.ca/services>), and through accelerators, incubators, and organizations like Scale AI as part of our supported AI projects.

## UNLIMITED POTENTIAL

Once you've laid down a solid foundational strategy, the sky's the limit for your IP thinking. However, it's crucial to recognize that an IP strategy isn't an isolated thing; it's an integral component of your overall business strategy. Sustained growth requires regularly exercising your IP brain and IP muscles.

## TIME TO BEGIN!

Many believe that proper IP management is costly and complex. However, starting Steps 1-5 of this guide can be as affordable as CDN \$5000 (some steps are free!), making starting even more attainable than you realized. This guide also simplifies the process to remove any last barriers to getting started.

Now that you understand the costs and know where to begin, there's no need to hesitate. Kick off your IP strategy today. *You can do this!*



**“Even if you're inclined to handle things yourself, expert IP guidance is essential at key points along your IP journey.”**

#### About the author:

Todd Bailey, Scale AI's Chief IP Officer and General Counsel, leverages extensive business, legal and technical expertise to help Canadian SMEs embrace a practical "IP thinking" approach to artificial intelligence, encouraging leaders to integrate IP strategies seamlessly into their daily and long-term business plans.

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## Reach Out ↓

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