Tech, the Economy, and Transformation

IP Strategies For A New Era

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Overview

Innovation, how we protect it, and the reasons why have been evolving rapidly for the past few years. **2024 might just be a turning point in IP history** as recent shifts across business, technology, and the workforce converge. Taken together, these changes in IP's working landscape mean a new reality for the profession may be taking hold this year.

Because of 2024's unique confluence of events, the IP industry is on the edge of a massive transformation. In just one year, what the profession looks like and its everyday operations are poised to be completely different from what it's been in the last 20 years. But **with this transformation comes opportunity** — the opportunity for IP leaders to efficiently build significantly better portfolios, making good on IP's potential to create value for the organization.

To bring in the new year and address this historic time, Tradespace interviewed thought leaders in the IP community across industry, tech, services, and academia. Based on their insights and recommendations, this report offers an **actionable vision** for how we hope IP leaders will navigate the transition into this new era.

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The Forces Behind IP's Historic Year

Business Is Under New Economic Pressure Post-Pandemic

In the first section of this report, we'll take a detailed look at the specific forces behind IP's transition. Looking at the broader world of business, it's clear **we're in challenging economic times**. Whether we're approaching recession or not, companies have had to adjust to the post-pandemic economy. Access to capital has become highly constrained. Global IPO value fell over 70% in 2022 from the year before and M&A activity reached a 10-year low in 2023. Widespread layoffs, notably in big tech, plus last year's bank failures hit this new economic reality home.

These economic headwinds have meant legal departments are facing tremendous pressure to cut costs. Even in 2021, 75% of general counsels said that they don't expect their budgets will be adequate to support company demand. Of the in-house IP counsel we interviewed, most expressed that IP teams are first from the legal department on the chopping block. IP tends to suffer from a "persuasion gap" when it comes to communicating the role of IP to company leadership, so IP leaders can struggle to defend their budgets.

IP budget cuts have meant **layoffs**, **hiring freezes**, and an inability to shift more work to outside counsel. These layoffs have felt especially painful because many IP leaders have aggressively grown their in-house teams over the last few years to reduce reliance on outside counsel. Now they're being asked to reverse this hiring trend, but without replacements or increased budget to spend on outside counsel.

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Budget Cuts And Reduced Headcount Are Straining IP Teams

Budget constraints are affecting workplace dynamics as much as they are headcount.

Retention at law firms and IP departments had already been falling, especially among junior employees. These newer attorneys, IP managers, and paralegals are the lifeblood of IP teams—they're the ones who put in the long hours to do the large volume of tedious but necessary work behind the scenes. Younger generations, however, are increasingly **seeking more meaning** from their jobs.

Shrinking IP departments have made retention issues, burnout, and morale even worse by putting more responsibility on remaining team members. One of the experts we interviewed

knows of an IP counsel managing 750 disclosures a year as a two-attorney team and no ability to increase headcount. That workload equates to 31 disclosures per attorney per month, or 1.5 per working day. More and more, the average IP department **simply doesn't have the**resources to keep up. Beyond overworked staff, the current IP workload means they have even less time to be strategic and focus on generating high quality IP. When only a handful of attorneys have thousands of assets to manage, the nuances of their portfolios get overlooked.

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Innovation Is Accelerating And Evolving Like Never Before

IP is facing internal challenges, but it's up against equal if not greater pressure from technology itself. Despite tech's performance from a market perspective, **the pace of tech innovation has been accelerating** — R&D teams are inventing much more. There have been only three years in the last 25 where the annual patent application filing rate was not positive: year on year, patent volumes have increased. IP team resources are being limited while their services have never been more in demand and there's never been more risk to manage.

Inventions — and threats — aren't only increasing in volume; protecting innovation has become far more complex because of growing invention volume, technology convergence, and shifting business strategies. **The sheer quantity of patents** attorneys must manage today makes it harder and harder to know whether any given invention disclosure is novel, how to create winning claims strategies, and whether a company is infringing on other companies' patents.

Meanwhile, every company is now a tech company with inventions regularly cutting across sectors. Gone are the days of siloed tech. Industry lines have blurred, with individual technologies becoming highly interdependent. **Companies that used to only deal in one technology now must deal in many:** drug discovery companies now have armies of data scientists and cars have become computers on wheels. In the old days, Ford's IP attorneys only needed expertise on wheels and engines. Now, they need to be able to understand the IP being developed in 20 additional different areas.

Protecting innovation has become far more complex because of growing invention volume, technology convergence, and shifting business strategies.

Al And Other Cross-Industry Technologies Are Making Competition Fierce

On top of staying abreast of their own innovations, IP teams need to be conscious of accelerating innovation among competitors as well. More competitive inventions and patents mean more for IP teams to track, interpret, and respond to with their own IP strategies, lest a higher risk of getting sued for patent infringement. Avanci's 2023 launch of its 5G Connected Vehicle licensing program is just one manifestation of these technical and legal challenges faced by industries today.

Because technology is converging, **competitor sets are widening, bringing more and more players into the mix**. Any customer, partner, or supplier today could easily be a competitor tomorrow. Companies need to be fully aware of their market's dynamics and the true competitive landscape to inform their IP strategy. Those same automotive IP attorneys now also have to keep track of external IP portfolios that on the surface have nothing to do with the automotive space. Conversely, these rising competitive pressures are making the need for valuable patents that limit competitors' options, effectively protecting revenue and market position, higher than ever before. Savvy IP creation is increasingly key to securing market wins.

Much of this **new** innovation has been driven by AI, the tech headline of 2023. **AI is** undoubtedly one of the most significant factors behind the changing IP landscape, and is one of its biggest opportunities. AI has finally matured from both a tech and application perspective — players have learned how and where to deploy it, safely, with unprecedented results. Berkeley Lab's A-Lab is an AI tool that, in collaboration with Google DeepMind, has both created thousands of brand new materials and tested their viability for various applications. Without AI, robotics, or advanced simulation it would have taken centuries to discover these new materials. This example is only one such case of how AI is heralding exponential growth in innovation. Many more are coming soon.

Any customer, partner, or supplier today could easily be a competitor tomorrow.

IP's Complexity Will Continue To Outpace Government Guidance

If the present picture of technological innovation wasn't dense enough, AI represents another contributing factor to the growing complexity of IP protection. With software long being difficult to patent, the changing nature of innovation toward digital, and the Thaler v. Vidal ruling that AI can't be an inventor of patents, **trade secrets have suddenly become a topic on every IP attorney's mind**. Adding to increasing workloads and competitive pressures, deciding whether to pursue a patent, trade secret, or open source strategy has suddenly become much more high-stakes.

Despite breakneck technological advancement and mounting complications around protection, it isn't likely that IP will be able to rely on the US government for relief. Teams should assume that the many frustrations with the current IP system and patentable subject matter will continue. The Supreme Court has been unwilling to step in on IP issues. PERA and the PREVAIL Act have been introduced to Congress, but our experts expect legislative gridlock because of the uncertainty of a US election year. **The confusion caused by the IP legal system is here to stay** in 2024.

Al For IP Management Isn't Coming, It's Here

Al is creating new demand for protection, but it's also begun emerging as an internal IP solution. Al is now a regular topic of conversation and has been integrated into many areas of business operations. Most CEOs now expect their company to invest significantly in Al in various ways. According to a recent survey, around 3 in 4 CEOs say Al investment is a priority for their company. Al is now appearing in more and more legal tech including for IP teams and patent offices, and it's only a matter of time before executives and GCs expect Al to be integrated into disclosure, portfolio management, and tech education.

Legal teams haven't considered AI adoption until now for two reasons: concerns over data privacy risks and gaps in capability. Until recently, deploying company-specific instances of AI models, a requirement to prevent data co-mingling, was prohibitively expensive. Moreover, AI models didn't have the context windows to analyze long, complex legal documents or the domain expertise to interpret IP terms. Models also struggled to handle mixed mediums of pictures and text, with IP documents often containing both. In 2023, however, costs were lowered and capabilities improved enough to ameliorate these concerns, opening the door for a stepwise improvement in AI-assisted IP.

Based on the external factors discussed so far, AI might be seen as only a stopgap measure or passing trend. We, however, see AI as an opportunity to make 2024 a pivotal and transformational year in IP management. Until now, it's been difficult for IP functions to be strategic — to fully understand the legal, technical, and business value of their entire IP portfolio, let alone communicate it. AI's ability to **meaningfully and holistically analyze hundreds of innovations at once**, leaving human practitioners to focus on strategy, represents an industry leap even beyond the one from paper patents to digitization.

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Fulfilling IP's Potential To Drive Business Success

The economy has always cycled, technology is always advancing, and IP departments have always had to make tradeoffs between strategic thinking and day-to-day operations. But IP organizations have never before had to **adapt to so much new innovation while being so under-resourced**.

To not just survive, but flourish in this new era, IP leaders need to double down on their commitment to value. The job is not to just run up the patent count as a support function. IP leaders must prioritize aligning their portfolios to company strategy, because IP has never been more critical for business success.

Historically, IP has often been too busy keeping the trains running to deeply evaluate invention disclosures, resulting in patents, and eventually large portfolios, that are of questionable value. Because evaluating patent value is difficult, everything is maintained. Decades of this pattern has led IP to be seen as purely a cost center.

The time is now to explore how we can do better. And for the first time, IP has the tools to do it with AI. Getting good patents from the beginning makes everything else easier, including driving — and proving — ROI. AI won't be a solution on its own, however. For IP to drive business success, teams will have to work differently: more closely and dynamically with the business, and with a focus on investing for the future.

Once IP attorneys understand these new expectations, they might ask: Is it possible? Can IP attorneys become deeply integrated business partners and drivers of value? Our experts unequivocally agreed that the answer is yes.

The real question lies in how to do it. What does it mean for IP to create value? Equally important, how do IP leaders communicate to leadership the value they have created? And especially when innovation keeps ballooning and becoming more complex?

The rest of this report aims to answer these questions. To equip IP in its evolving roles and responsibilities, we'll be offering IP teams strategies and tactics for successfully navigating this time of transformation. IP management practices must change, but so should the role of IP in business more broadly, toward a more agile and value-driven approach.

One might argue that economic conditions will soon improve, but we believe IP's new emphasis on value creation will persist even after economic stress is relieved. Once business leaders catch onto the idea that **IP portfolios can create more value for their companies**, this new lens will be difficult to abandon. The continued success of AI implementations will only drive leadership to demand more.

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Designing A Transformational Year For IP Management

Think In Terms Of Payoffs, Not Just Cost

Legal and IP teams often hear the business refer to them as the "department of no" — they're seen more as telling people what they can't do and warning them of risks, less as shepherding their clients through challenges and meeting business goals. This year, we hope they begin to be seen differently. We hope IP will be able to work more proactively, collaborate more creatively, and take more risks, **employing strategies they may have previously shied away from** like IP monetization.

IP monetization can be a controversial topic. It's not a strategy that's right for every company, but could be further embraced as IP teams are called on to generate business value. "Monetization" tends to mean adversarial licensing today, but look at universities: they generate substantial revenue by transferring their technology to companies who can benefit from it. Why should the corporate universe be any different? Identifying IP that is valuable to others, either through **friendly technology transfer or enforcement**, and developing models for facilitating these transactions will increasingly become a standard part of the job of IP professionals.

In addition to the existing ways for IP to drive revenue, **new options like IP-backed financing are emerging**. While IP financing isn't a blanket strategy either, being informed on it demonstrates how IP leaders can be a partner to the business. By building high quality IP portfolios that are attractive to lenders and making their finance counterparts aware of this option, IP leaders can create new opportunities for company growth.

Understand And Align IP Strategy To Business Objectives

Building on the above, perhaps the biggest key to proactively driving value for IP teams today is being aware of **broader business forces**. IP attorneys are skilled at understanding the

technologies behind innovation. IP teams now need to understand the business implications of these technologies as well — both internally and externally — to be successful for their organizations. Market intelligence and IP intelligence are usually performed in different departments using different systems; imagine a world where business and IP information were seamlessly merged to drive better decision making.

To stay competitive in this sense, IP teams must become more well-acquainted with **company** strategy in relation to competitive market dynamics. Without that awareness, teams won't be able to ensure that IP serves the business goals of protecting revenue and deterring competition. Knowing the business will also be essential to being prepared to defend against possible enforcement. In fact, certain industries should assume that competitors will be more aggressive in enforcing patents as a consequence of increasing technology and market convergence, plus general pressure to increase ROI.

A common business-supporting practice for IP teams in the future will be demonstrating **clear, traceable linkages between company strategy, products, features, and associated IP**. It's all about relevance: Why do we have this patent? What product does it support? How does it and the size of the patent family reflect business priorities? How does the portfolio protect revenue, keep competitors at bay, and widen the set of strategic options? What is the right size of the IP portfolio for our business, relative to investment? Having these answers will help IP teams manage IP in proportion to business case and revenue, and will help them clearly communicate the value of IP in terms leadership understands.

Clean Up Portfolios To Reflect Quality, Not Quantity

The pressure IP teams are facing impacts all aspects of the innovation and patenting lifecycle. IP must be a partner to innovation throughout its entire journey, and ongoing legal protection and business impact must be intrinsically aligned. IP's open secret is that **only a tiny portion of patents are actually valuable**, as many studies suggest. More than 30% of patents that are challenged have at least one claim invalidated. On average, 15% of patents are abandoned after four years, another 19% after 8, and an addition 21% after 12 years. How often does our industry patent because we can, not because we should? How many patent departments are measured by patent volume, not quality? How many claims are so laden with limitations dictated by prior art that infringement is a near impossibility?

Connecting specific pieces of IP to products and revenue streams also means identifying parts of the portfolio that aren't of value, which likely applies to most company portfolios. IP teams should **feel empowered to stop supporting low quality patents**, but they need access to good information to do so. Many attorneys and business units view the abandonment decision as a difficult one because they don't want to come across as having wasted time, resources, and money. It's difficult to quickly get an accurate assessment of a patent's utility, so they err on the side of caution and renew. Keeping IP assets is the path of least resistance, but it's not always best. Using data to justify asset decisions will mean proactive, confident pruning and better portfolio management.

Knowing whether teams are making smarter decisions about their portfolios will involve developing metrics for portfolio quality. Tracking KPIs like forward citations or proportionality between the patent family size and the value of the product being protected logically

supports the previous two strategies of accounting for the payoffs and tradeoffs of actions and aligning IP to business objectives. Once IP protection is shifted to reflect products and their importance to the business proportionally, more sophisticated metrics can begin to be developed, in collaboration with leadership. Metrics for individual protections can follow as KPIs at the portfolio level are instituted as well.

For New Innovations, Invest In Full Diligence And Best Practices For Trade Secrets

Evaluating IP through the lens of cost and business value applies to new inventions in addition to existing ones. Filing quality patents from their inception builds the best foundation for a valuable IP portfolio. **Every patent filing creates an aftershock** of expensive maintenance payments. Good, early decisions create positive ripples through a portfolio's lifetime. Quality in this context will be achieved by periodically doing quick, actionable, and reliable **patentability studies based on deep market insights** instead of simply filling and hoping for the best. Of course, prioritizing diligence requires helping attorneys find more time in their days and giving them better access to information — benefits achieved by the use of AI.

As discussed above, many tech innovations are increasingly better protected by trade secrets, not patents. Though they're a topic in IP that has a lot of buzz, **best practices around trade secrets are inconsistent**, varying from organization to organization and industry to industry. Different lawyers also have different approaches to trade secrets depending on whether they're litigators or patent development professionals. We see the most mature IP teams investing in the development of trade secret best practices for their organizations. This process will look different for every IP team, but some universal wisdom exists already. All teams need to be able to quickly decide which protection strategy to pursue. Trade secrets are not just about company-wide policies. They require measures at the asset level, not sweeping assertions of rights for the whole enterprise. Identifying, documenting, and tracking these assets will be just the beginning of developing consistent trade secret strategies.

Six Guiding Principles For Managing Trade Secrets

View the Full Guide

- 1 Secrets are advantages
- 2 Assets, not categories
- One strategy per asset
- Recruit the business
- 5 Employee education
- 6 Third party management

Make Plans For Making AI Part Of The Organization

Al is no longer just coming — it's here to stay. <u>According to USPTO Director Kathi Vidal</u>, "Al is going to be ubiquitous." It will be used by all corporate teams in some way by 2030. We hope this report helps IP stakeholders better understand the historic conditions behind this urgency. Because of overwhelming service demand, market complexity, and resource constraint, **IP** teams can simply no longer afford to ignore Al as a solution.

The impact of AI and related technologies on IP management will be vast. 2024 should be the year that IP leaders begin tackling the challenges of understanding its potential, demystifying it for their teams, and planning for its adoption. If used well, AI can assist IP teams in achieving the new way of working we've outlined in this report: from freeing up time and energy to allowing a focus on strategy, alleviating burnout, identifying monetization opportunities, uncovering business cases, evaluating and cleaning up portfolios, managing IP more effectively, aiding in diligence, helping to forge collaborative partnerships between IP, leadership, and other functions, and closing the "persuasion gap" by making IP more understood. In other words, AI will finally let IP do more with less, a lot more. It's not an opportunity to be delayed in today's climate.

Top Questions To Ask Your AI Provider

- Do you have experienced IP attorneys on your team?
- What are the specific tasks you leverage AI to do?
- How are you using AI to do what you do (document retrieval, GPT prompts, etc)?
- How is your training pipeline designed to avoid triggering a public disclosure?
- Can users specify whether their data is used for model training?
- Do you use open source AI models, and/or do you use proprietary ones?
- Who owns the IP rights associated with the Al's output?
- 8 What are the top security measures built into the tool?

The Era Of Strategic IP

Without innovation, there is no IP. But all too often, the cobbler's children have no shoes. IP professionals deal in the new and revolutionary on a daily basis while serving their organizations. They should not forget their own work when ushering in change.

Never before have IP departments been so poised to make working strategically, in partnership with the business, a reality as opposed to a strong aspiration. The **historic convergence** of economic constraint and demand created by unprecedented technological breakthroughs mean IP leaders are **justified in pursuing bold change**. The recent maturation of AI means that they can act with confidence. Focusing on creating value through IP versus the act of maintaining it is now not just a theory, but a real possibility. Given the current shifts in technology and markets, this inner transformation may not only be desirable for IP, but necessary.

We hope this report has validated the current experiences of IP professionals, confirmed the urgency behind their need for solutions, and outlined accessible strategies for successfully navigating the transition to the company-aligned, AI-powered IP age. The expectations put on IP professionals today are great, but only because their vision and abilities are much needed in this new era.

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