



The IP Supply Chain: Managing 21st Century Innovation

Information is the currency of today's economy, and the most valuable information an enterprise has is often embodied by its IP. With up to 80 percent of a business valuation residing in intangibles, innovation is at a premium. More than ever, IP plays a critical role in the innovation process by taking ideas and converting them into economic assets.

Although the ideas and IP are constantly evolving, the processes utilized to assess, file, manage and retire IP have not evolved in step. This paper looks at how the IP value chain is changing and what firms should be doing now to reduce waiting, rework and defects so expert resources such as IP attorneys can focus on value-generating tasks instead of process management tasks.

Creating an Innovation Economy

Since the start of the 20th century, there have been several waves of innovation that have changed the way business and industry operate.

The first of these was Henry Ford's creation of the assembly line, which forever altered the ways of manufacturing. The simple change of creating process and work flows that let workers stay put while the products they are building move down the line increased efficiency, improved profitability, and enabled Ford to offer wages that engendered a higher degree of employee loyalty—all ultimately leading to a better product.

What Ford crafted, Toyota refined in the Toyota Production System (TPS), which gave the world the concept of just-in-time manufacturing and instilled in management and workers alike the need to stop worrying about reducing cost and instead focus in reducing waste—of overproduction, of time, of movement to name a few—by eliminating inconsistency while improving flexibility.

The next wave of innovation came in the form of the digital computer. However, in the early days of the computer age, the limited power and storage capability of enterprise mainframes meant that few companies could afford to use 'data processing' to address every business process. The mindset that computers were not for the mass market was pervasive—even IBM founder Thomas J. Watson said in 1943 "I think there is a world market for maybe five computers."

We all now know that prediction was off just a bit, and as computer power began to increase according to the law named for Intel's Gordon Moore who predicted a doubling of power about every 18 months, their capabilities grew to the point where they could be used beyond simple record keeping and applied to manufacturing resource planning, known today as enterprise resource planning or ERP. Simply stated, ERP was the first information revolution for the 20th century supply chain, powering JIT and accelerating the refinement and expansion of Toyota's TPS through the 1970s and beyond.

The New Industrial Revolutions

Now, well into the second decade of the 21st century, a new economy has emerged, one based on innovation and information. In a world where “there’s an app for that”, being able to deliver a new, unique functionality, whether monetized directly through B-to-B or consumer sales, or through licensing as part of other solutions is increasingly adding to an organization’s bottom line. This new industrial revolution is powered by the IP supply chain, and just as ERP enabled new efficiencies and a better understanding of the value that existed in 20th century industry, today’s organizations need to have a firm grasp on their IP lifecycle. They need detailed processes in place during each stage from idea disclosure to preparation, prosecution and eventual maintenance to get the most out of their IP, reducing waste and driving efficiency up, exactly as previously developed for industrial processes. Businesses that most efficiently leverage their IP are the winners in this new era. Ultimately enterprises should be able to mine their IP for actionable insights, and utilize IP as a window into new ideas and new ways of monetizing existing assets.

The Innovation Information Department

As technologies and value chains evolve, so do the players who interact with IP, systems and processes throughout the IP lifecycle. For example, IP attorneys have been considered risk mitigators and gatekeepers who in the past often inhibited innovation simply by saying “no!” to ideas and inventors. Today, the best attorneys have become champions of innovation by taking advantages of new tools and processes and embracing the innovation economy for all it can bring to the business or firm. In many cases, this means adopting a very different mindset—and perhaps a different skill set—than many attorneys have today.

Firms that embrace innovation should create an “innovation information department” composed of all the stakeholders, unifying their operations for maximum efficiency and collaboration across organizational lines. The result—better business decisions and real bottom-line impact. Following the IP lifecycle, the team should include inventors and engineers, in-house counsel, law firm attorneys, administrators, docketing clerks, and annuity payment service providers as well. Development and deployment of cross-functional teams like this not only improves the efficiency of the IP supply chain but can change the way innovation occurs within the organization by enabling simpler and richer collaboration across geographically distributed teams.

Best Practices In IP Process Management

Today’s information technology systems enable automation and integration of processes at a level unthinkable just a few short years ago. Which approaches deliver the maximum return on IP? Let’s look at each step in the IP lifecycle.

Since inventors and marketers work in many languages using every browser under the sun, during disclosure they must be able to submit and track their ideas just as easily without imposing restrictions on the submission process. Disclosure tools must automatically route submissions to subject matter experts, patent committee members and evaluators so they can provide their ratings and recommendations electronically, as well as in a scheduled meeting environment. Additionally, automated reviewer selection should be enabled with pre-defined business rules to speed the application process by putting the right information in the right hands at the right time. Changes made by inventors or reviewers must be tracked to provide an audit trail of what was changed and when—and by whom.

Furthermore, in today's world of Big Data analytics, the capability to demonstrate those hidden factors driving and inhibiting innovation planning and performance can determine whether IP will ultimately be profitable or not. Finally, today's invention disclosure systems should integrate with external systems—for example importing HR data to leverage the latest information about inventors including addresses, citizenship and employment status.

Managing IP is daunting at best. Critical to success is having a solid structure for application preparation, filing through prosecution and maintenance processes. First, every stakeholder with access to IP data should only have access to information relevant to their particular role and business group. Next, automation should drive most of the processes, such as docketing; drafting submissions, the review and approval processes; preparation of formal documents; handling of divisional, continuation and CIP approvals; management of international filing review and approval processes; and simplifying annuity review and approval processes. Having the ability for in-house patent counsel to manage budgets, estimates and actuals for each prosecution activity further enables efficient resource management.

Best practices for IP management include having a centralized repository for matter information. These centrally organized electronic case files should store all correspondence and emails between attorneys, innovators and other case participants to provide a single source of all relevant information. Prosecution work flows should encompass every action including restriction requirements, office actions and their responses, notices of allowance, checklists and allowed claims, proofs of use, and support documents in any format, with official correspondence stored as unalterable images in the exact form in which they were filed or received from the patent office.

With so many opportunities for error, docketing management must be fully integrated with case files so that docketing is automatically associated with cases and users can instantly link from docket to the case file, or from case file to docket, and should support IP statutory country rules for countries in question, and enable addition of your own custom docket generation rules.

Monetization through IP Transactions is a common end goal in today's innovation economy. To that end, having the ability to apply visualization tools and analytics that help determine what's happening from both the 50,000-foot level and the 5-foot level can let you spot trends, find anomalies, and identify strengths and weaknesses by leveraging your IP assets data to conduct historical and comparative trend analysis. Having a centralized repository also eases third-party matters including disputes, assertions, investigations, freedom to operate, invalidation and product clearance analysis amongst others. Of course, having the ability to track terms and conditions, royalty payments and rights for in-licensing and out-licensing management are critical as well.

Achieving IP Agility

Just as IT developers have migrated to an “agile” model, where frequent builds of software features and functions create what some call a constant state of release, so too are IP management tools changing, moving from repositories that just mirrored paper processes to new, data-driven IP lifecycle optimization tools that apply the best of Big Data business analytics to the innovation supply chain, enabling businesses and firms to realize the benefits—Toyota style—of reducing the “waste” inherent in the IP lifecycle by eliminating waiting time and tightening up the workflow by automatically presenting information to the team member—attorney, subject matter expert or reviewer—who needs to take action to move the process along.

Firms that achieve IP agility have processes that are more automated, more repeatable, more scalable and most importantly more measurable. The result—working on IP projects becomes more about the IP itself and less about the work—ultimately delivering a highly optimized IP workflow that gets the most out of each project thanks to insights possible only through a well-organized, highly-automated, central data repository.

Take the Next Step

Lecorpio is streamlining the IP innovation economy for firms of all sizes and types.

Automated work flows reduce cycle time to process new ideas, while Lecorpio's ability to streamline frequent administrative processes with rapid speed-to-approval times significantly improves overall performance. Additionally, inventors find a platform with advanced self-service capabilities to view the real-time status of their submissions and awards. What is the bottom line for creating a new IP supply chain?

Lecorpio's suite of IP management products reduce the time between disclosure, filing, prosecution and maintenance of patents or trademarks, effectively increasing the number of events that each attorney can manage every day, month and year. By increasing the efficiency and thus reducing costs, Lecorpio solutions pay their own way.

To find out how Lecorpio can bring your firm into the 21st century innovation economy, visit www.lecorpio.com, or call (866) 841-4744.

About Lecorpio

Lecorpio, the leader in IP management and analytics solutions, helps innovative companies quickly turn ideas into assets. The enterprise-class suite of applications spans the entire IP supply chain, including invention disclosure management, patent and trademark management, e-billing, licensing management and general matters management. The solution includes powerful work flow capabilities that easily configure to a company's business process and includes an IP dashboard with over 160 KPIs.

Lecorpio is used by 5 of the top 20 most active US patent filers, as well as well-known innovators such as Adobe, T-Mobile, Analog Devices, Rockwell Automation, NEC, NetApp and Red Hat.

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Lecorpio offers a full suite of products that can be combined to deliver the perfect solution to empower your IP department.

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