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# **Executive Summary**

As breakthrough technology continues to transform the global economy, the rise of intangible assets is driving growth within the manufacturing sector and wider economy. However, intellectual property is often viewed as an enigmatic legal concept with a narrow lens despite its expansive reach across functions and organizations.

To understand the current state of intellectual property management in manufacturing, Aon and the Manufacturers Alliance for Productivity and Innovation (MAPI) conducted qualitative and quantitative research that identified three main findings.

Intellectual property (IP) is:

- 1. Misunderstood
- 2. Undervalued
- 3. Underinsured

As digitalization elevates services and technology in manufacturing, our research reinforces the need for manufacturers to consider a strategic approach to intellectual property, advance valuation methods, and elevate risk management practices. Along these lines, key findings include:

- Foundations in place to build upon Overall, three-quarters of respondents describe their IP management structure today as "centralized" and IP strategies are generally defined and applied consistently, especially within smaller organizations.
- Uneven IP engagement Over half of companies reevaluated their overall IP strategy in the past two years, but only 1 in 10 have conducted a valuation with a third-party during the same period.
- A business case remains paramount The top three IP management challenges or barriers to success are:
  - 1. Resource constraints
  - Decentralized IP management/unclear ownership
  - 3. ROI/the business case
- Risk is significant and rising Three in five manufacturing leaders see IP management ranking as a top 10 business risk for their company, and a majority expect this risk to increase in the next two years. Over half of companies reported experiencing an IP "event" in the past two years (typically patent infringement).
- Room to learn from leaders Few companies (1 in 4) believe their organization is leading in their IP management practices.





## Introduction

As technology disrupts industries with new sources of value creation, organizations must (re)assess how they prioritize, manage, and appraise intangible assets. Manufacturers face new imperatives to develop, maximize, and protect the value of their IP. The purpose of this report is to bring to the fore the urgency and importance of IP as compared to other assets manufacturers own.

When the "Fourth Industrial Revolution" was introduced by Klaus Schwab, he identified four disruptive trends in the next phase of digitalization in the manufacturing sector:

- 1. Big data
- 2. Advanced analytics
- 3. Human-machine interfaces
- 4. Digital-to-physical transfer.<sup>1</sup>

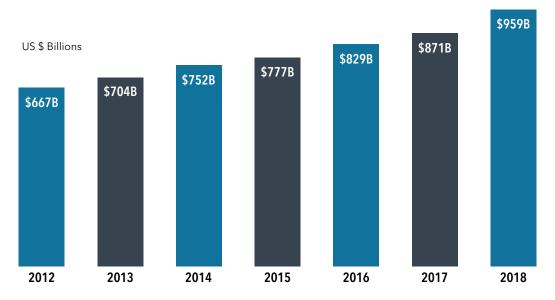
One of the greatest challenges these trends in Industry 4.0 present to manufacturing leaders is managing the associated investment in IP. Increasing investment in intangible assets, including digital manufacturing technologies, such as 3D printing, machine learning, artificial intelligence, robotics, cloud computing, Industrial Internet of Things (IIoT), quantum computing, predictive analytics, and distributed ledger continues to feed the evolution from tangible to intangible assets, which is proceeding rapidly and spans nearly all industries, geographies, and sizes of organizations.<sup>2</sup>

As one general counsel at a large industrial manufacturer noted of IP in their organization, "digitalization is becoming a big issue as we're getting involved or being concerned about competitors that we haven't considered in the past. We're seeing a lot of Chinese IP."

"MOST OF THE CEOS WE SPEAK
TO RECOGNIZE THE IMPORTANCE
OF TRADE SECRETS TO THEIR
BUSINESSES, BUT WE STILL SEE
TOO MANY WHO HAVE THEIR 'AHA!'
MOMENT WHEN THEIR COMPANY
BECOMES A VICTIM. ONLY THEN
DO THEY REALIZE THAT THEY
SHOULD HAVE DONE MORE TO
PROTECT THEIR TRADE SECRETS."

- MARK ELLIOT, EXECUTIVE VICE
PRESIDENT OF THE US CHAMBER
OF COMMERCE'S GLOBAL
INTELLECTUAL PROPERTY CENTER

**Overall U.S. Investment in Intellectual Property Products** 



Source: US Bureau of Economic Analysis, Table 1.1.5; last revised October 2019 (Federal Reserve Economic GPDI)

Intellectual property is integral to business competitiveness. IP products include investment in research and development (R&D), along with investment in software and in entertainment, literary and artistic originals. Within the Federal Reserve Economic Gross Private Domestic Investment (GPDI), R&D is further defined within the manufacturing space as pharmaceutical and medicine, chemical, semiconductor, other electronics, motor vehicles, aerospace, and other manufacturing. According to the U.S. Bureau of Economic Analysis, the total US investment in intellectual property for 2018 was \$959 billion. By another estimate, IP-intensive industries employ more than 40 million Americans, account for 74% of exports, and \$5.8 trillion in GDP.<sup>3</sup>

Aon and MAPI research finds that a holistic approach is required for manufacturing organizations to manage risks associated with investments in patents, copyrights, trademarks, and most importantly, trade secrets. This report provides manufacturing leaders with a roadmap to prioritize strategy, develop valuation methods, and address some of the risks associated with trade secrets.

# Best Practices in IP Management

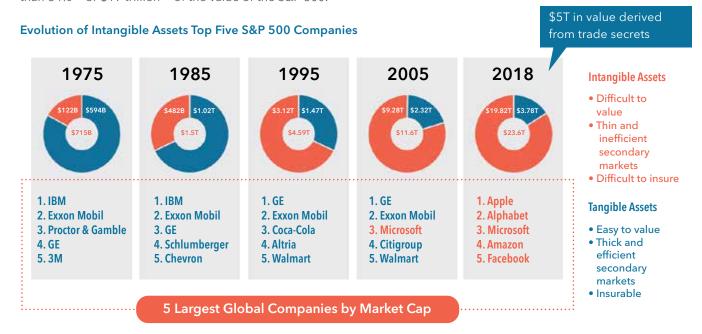
As intellectual property powers business today, it is critical that companies revisit their innovation strategy to ensure that their IP development plan and current portfolio align with the company's goals and vision. A comprehensive strategic plan addresses innovation development and protection and should be executed consistently and reviewed regularly. Leading practices include:

- 1. Align dedicated IP specialists with product developers to help understand the patent landscape and reduce the likelihood of infringement claims
- 2. Proactively buy or license patents that might threaten an ownership claim to your current innovation
- 3. Refine employee training and exit program to reduce exposure to IP theft
- 4. Institute a diligence program to review new and existing patents and software
- 5. Develop an insurance program that offers comprehensive protection against the potential damages resulting from intellectual liability infringement claims and trade secret theft

# A Strategy Shift

## Intellectual property misunderstood.

In 1975, the five largest companies by market capitalization in the S&P 500 were: IBM, ExxonMobil, Procter & Gamble, GE, and 3M, according to Aon analysis. The five largest today are Apple, Microsoft, Amazon, Facebook, and Alphabet. The value of intangible assets now represents more than 84% – or \$19 trillion – of the value of the S&P 500.

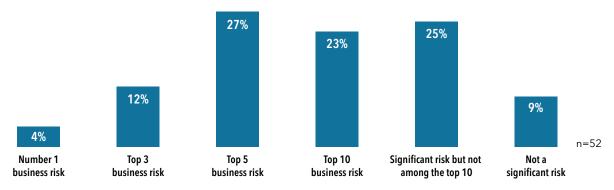


Source: Ocean Tomo report, Intangible Asset Market Value Study 2017

Tangible assets long dominated the balance sheet of most firms with property, plants, and equipment. This has changed with the adoption of digitalization and new technologies. To be sure, many manufacturers are still looking to extend the lifespan of machines, reduce device breakdowns, and increase throughput.<sup>4</sup> However, the global economy has been shifting steadily from manufacturing to services with an ever-increasing number of firms deriving their value from intangible assets. These range from technological patents developed by software providers to next-generation machinery development undertaken by manufacturers. Increasingly, these intangible assets are the key to determining competitive advantage and industry winners and losers. It is important for executives to understand how IP contributes to a company's long-term growth trajectory—as well as risk.

#### IP Business Risk Ranks High for Majority of Manufacturers

From a business risk perspective, how do IP risks (e.g., IP liability or trade secret theft) compare to other business risks for your company?





Addressing IP challenges requires a new strategy for technological investments and partnerships. Back in 1936, sociologist Robert K. Merton highlighted five possible causes of unanticipated consequences, one of which applies to firms when dealing with IP assets: "following habits that worked in the past may not apply to the current situation." One cannot apply the same approaches for tangible assets to intangible assets.

Executives who do not engage in a strategic approach to IP management can subject their organizations to demands by competitors and non-practicing entities (patent trolls) who own IP in the space. Patents, in particular, carry high costs. On average, the global cost of a patent can range between \$25,000 to \$55,000 in addition to maintenance fees. This figure will likely increase as the United States Patent and Trademark Office (USPTO) recently asked for public comment for a proposed fee hike expected to take effect in January 2021. As one executive we interviewed explained, "That's our biggest challenge. Managing the costs and prioritizing whether something is justified to go through that cost." Losses can be significant.

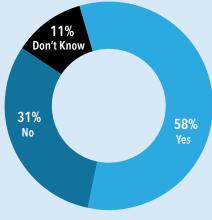
Large Financial Awards Due to IP Litigation						
Subject Matter	Loss	Company	Paid To	Type of IP		
Acid Reflux medication, Protonix	\$2.2B	Teva Pharmaceuticals	Pfizer	Patent		
Hepatitis C drug	\$1.8B	Abbott Labs	Centocor, Inc	Patent		
Intravascular stents	\$1.7B	Boston Scientific	Cordis Corp.	Patent		
Karaoke recordings	\$1.2B	1729172 Ontario, Inc	Sony	Copyright		
Prosthetic valve for aortic stenosis	\$1.1B	Medtronic, Inc	Edwards Lifesciences	Patent		
Glypohsate-tolerant plants	\$1.0B	DuPont	Monsanto	Patent		
Kevlar	\$919M	Kolon Industries	DuPont	Trade Secret		
Instant cameras	\$925M	Kodak	Polaroid	Patent		
Designer handbags	\$864M	Xiang Ding Ai	Chanel	Trademark		
Hard disk drive magnetic materials	\$750M	Marvell Semiconductor	Polaroid	Patent		
Vacuum wound therapy units	\$645M	Healthcare Essentials	KCI USA	Patent		
Email, wireless communication	\$613M	Research in Motion	NTP	Trademark		

Source: Publicly available information with sources including but not limited to Lex Machina®, Reuters, GreyB Services, LexisNexis, Westlaw. Data does not reflect any follow-up appeals.

### **Understanding the Incidence of IP Events**

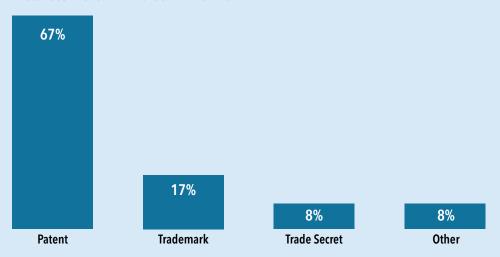
#### **Material IP Events Are Common**

Has your company experienced a material IP event over the last 24 months (e.g., a challenge to its IP assets, third-party infringement of its IP assets, or allegation that it is infringing third-party IP rights)?



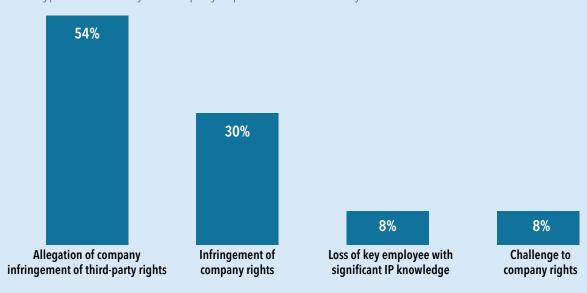
#### Patents Are the Most Common Asset Involved in Recent IP Events

Which of the following best describes the IP asset involved in the most recent event in the last 24 months?



#### **Allegations May Exceed Infringements**

What type of event did your company experience most recently over the last 24 months?



Source: 2019 MAPI and Aon IP Management in Manufacturing Survey

n=52



## Patents by the Numbers

Half of all U.S. patents (5M) were issued in the last 27 years.

The last 1M of U.S. patents were issued in the last 3 years.

China is issuing new patents at over 2x the U.S. rate.

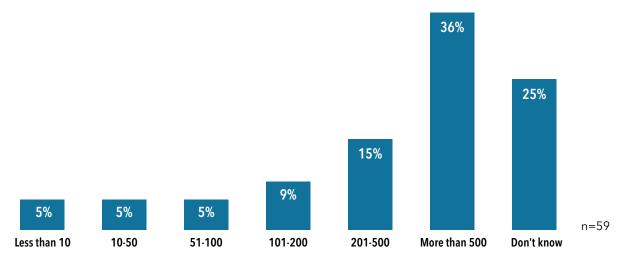
Source: World Intellectual Property Indicators 2019

The main benefit of protecting an innovation with a patent is that the patent will provide legal protection against other parties copying it with their own products or services. The downside is that when filing a patent, a company is required to disclose its inner workings, which in turn exposes the innovation to copying after the time limit of 20 years in the United States. Furthermore, if the patent is not well crafted, it may leave competitors open to copying the central idea and changing it *just enough* to avoid infringement.

Patent proliferation continues. As another executive interviewed in our study explained, "we face resource constraints, but I think part of that is because we're seeing more patents from China, which take a lot more analysis just given the language difficulties there." More than a third of manufacturers surveyed now report holding more than 500 patents.

#### **High Levels of Patent Holdings**

Approximately how many total patents does your company hold?





#### **Trade Secret Defined**

In contrast to patents, a trade secret is a form of intellectual property with three characteristics:

- 1. The information has commercial value
- 2. It is not easily available to others through proper means
- 3. It is subject to reasonable protections to maintain confidentiality and secrecy

The main benefit of protecting an innovation as a trade secret is that a company is not required to disclose how it works. This ultimately provides better protection from the type of competitive reengineering that can follow a patent filing. Trade secrets do not have an expiration date. However, should a competitor independently develop another company's idea, there is no legal framework to stop them from using it. Not all confidential information translates into a trade secret either. Each manufacturer must define what it considers a trade secret, from the production of a new plant hybrid to a new mechanical invention.

A tangible example can help to clarify. A manufacturer can patent an invention such as a vehicle radiator that requires less cooling fluid for a specific motor vehicle with a soldered cooling network. However, if there is something unique in the building of this invention that allows it to reach certain market-leading specifications, then the manufacturer can decide to maintain that production process as a trade secret in order to maximize their return on investment.

Risk to trade secrets does not originate outside the company only. There have been many cases documented where disgruntled employees have stolen trade secrets by downloading proprietary information to a USB memory stick. From aircraft trade secrets to wind turbines, one can argue that many trade secrets have left manufacturing firms to the benefit of their competitors.<sup>7</sup>

Technology and market trends coupled with recent court decisions on patent eligibility have altered the trade secret and patent equilibrium. While the debate continues over the impact of the patent wars on overall market competitiveness, the implications of trade secret theft continue to be misunderstood and ultimately underappreciated.

For some, trade secrets are thought to be the true workhorse of the digital economy because of their widespread importance. At the same time, trade secrets receive less attention because they operate in secrecy. As a result, we know much less about their role in market competition than we know about patents, copyrights, and trademarks.<sup>8</sup>

## **Patents Versus Trade Secrets**

	Patent Protection	Trade Secret Protection (EU & US)
Requirements	Must be novel, sufficient and inventive	No novelty, inventive step or sufficiency requirements. Must have commercial value and not be readily ascertainable
Disclosure Requirements	Disclosure required	No disclosure required
Later Disclosure	Unaffected by later disclosure	Affected by later disclosure
Subject Matter Exclusions	Some subject matter excluded from patentability based on jurisdiction	No exclusions
Process and Cost	Requires application process and official fees	Arises automatically, no official fees. Can be costly to maintain secrecy
Scope of Protection	Clearly defined by the claims	Defined by what the trade secret is purported, not restricted by jurisdiction
Geographical Protection	Patents are only enforceable in the jurisdictions they are granted in	No exclusions
Remedies	Damages (can be enhanced), injunctions, costs, royalties	Damages, injunctions, costs, royalties
Enforceability	Typically more straightforward to enforce if infringed	Need to show adequate maintenance of secrecy. Can be unclear
Term	20 years maximum duration	Potentially unlimited in duration
Risks	Can be opposed/invalidated. If not granted, the technology will still have been disclosed. Other parties can still rely on secret prior use provisions	Can be reverse engineered. Can be patented by another party. Can be disclosed by sale/ public use
Licensing	Patentee is free to license	Licensing must be done under a confidentiality agreement
Maintenance	Only requires renewal fee payments once granted	Requires lifetime maintenance to keep secrecy, can be complex



#### **Regulatory Environment for Trade Secrets: Recent Developments**

- The Defend Trade Secrets Act (DTSA) (Pub. L. 114-153) became U.S. law in May 2016
- The EU Directive on Trade Secrets was enacted by the European Parliament on June 2018
- China explicitly included trade secrets in revisions to the Anti-unfair Competition Law in April 2019

Enhancement of trade secret protection via DTSA helps to offset patent system contraction for innovators and is likely to lead to an increased focus on protecting innovation through trade secrets. Claims under the Act are on the rise due to an increase in employee mobility. DTSA provides a federal cause of action for misappropriation of a trade secret related to a product or service used in, or intended for use in, interstate or foreign commerce. The Interagency Taskforce (led by the Department of Defense) report "Assessing and Strengthening the Manufacturing and Defense Industrial Base and Supply Chain Resiliency of the United States," found that protection of the U.S. industrial base faces an unprecedented set of challenges, not least from the surprising level of dependence on suppliers in competitor nations.

#### **Trade Secret Best Practices**

Employee Awareness	Raising internal awareness that any confidential information (business or technical) not known to the general public may be a trade secret.
Discovery	Identification and cataloging of existing, high-value trade secrets, key innovations, data sources (and data itself), and know-how within a business unit.
Protection Measures	Understanding the threats and likelihood of those threats. The greatest threats are:  • Departing employees  • Failed business dealings  • Corporate espionage  85% of trade secret thefts are by employees and business partners.
Policy and Contract Review	Development of a set of company-wide trade secret policies for internal protection (employees/contractors) and external (third parties).
Incident Response Planning	Development of incident response plans that cover:  • Rapid Response  • Counter-actions  • Corrective actions

#### **Trade Secret Protection Considerations**



#### **SHARING**

Access control
Periodic review
Third-party access
Third party external disclosure
Least privilege



#### **GOVERNANCE**

Risk analysis and management Incident response planning and readiness Security assessments, metrics, and testing Security policies and procedures



#### **PREVENTION**

Storage locations
Remote access
Encryption
Secure file transfer
Data loss prevention tools
Physical security



#### **LOGGING & DETECTION**

Logging, monitoring, triage capabilities, and coverage Investigation procedures & forensic procedures Ability to detect potential loss



#### **PROCESSES**

On-boarding & off-boarding
NDAs and contractual agreements
Policy agreement
Security training
Approval for sharing/transfers



#### **TARGETS & THREATS**

Different types of IP warrant unique security considerations Data formats and methods of access



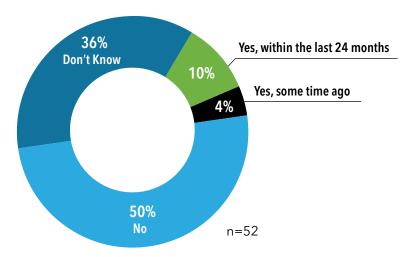
# Developing Valuation Methods

Intellectual property undervalued.

A report from the U.S. Chamber of Commerce finds that publicly traded U.S. companies own an estimated \$5 trillion worth of trade secrets. A recent study by PwC and the Center for Responsible Enterprise and Trade (Create.org) states that the economic loss attributable to trade secret theft falls between a whopping 1% to 3% of U.S. GDP.<sup>10</sup> However, it remains difficult to determine the total value of trade secrets to U.S. businesses at an aggregate level or at a company level.<sup>11</sup>

#### Third-Party IP Valuations Uncommon or Unknown

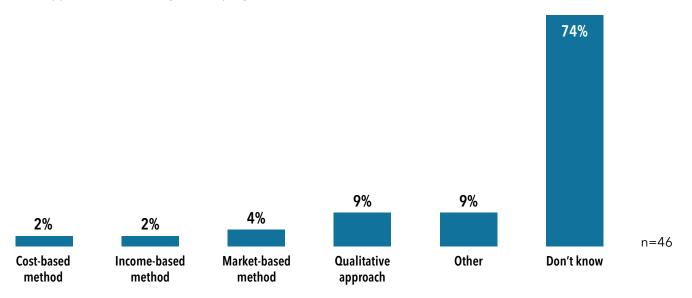
Has an independent third party conducted a valuation of your company's IP assets (including trademarks, patents, copyrights, trade secrets, and know-how)?



Unfortunately, by their very nature, trade secrets can be difficult to value for the uncertainty of their future economic benefits. Outdated accounting rules can result in financial statements understating the book value of intangibles and the potential income they stand to generate. For more reliable valuation results, manufacturers should consider expanding the range of data sources and techniques they use in valuation and develop methodologies that are suitable to the intangible asset being valued. Such methodologies provide new perspectives on various cost, market, and income approaches and can be integrated with an analysis of non-GAAP key performance indicators and other conceptual frameworks. 12

#### **Unclear Methods of IP Valuation**

What approach was used in your company's most recent IP valuation?



Source: 2019 MAPI and Aon IP Management in Manufacturing Survey

Although there is a lack of valuation and accounting standards, it is possible to model the potential upside and downside of IP valuation, strategy, and risk management with a combination of the methods highlighted in the figure above. Models will continue to improve as more data is collected.

Trade secrets play a pivotal role in business valuation and are essential to the well-being of the firm and the clients they serve. Until the DTSA was signed into law in 2016, trade secret law was predominantly governed by state law.

Trade secrets also have disadvantages that need to be properly understood. It is not misappropriation of a trade secret to independently discover the secret information or to reverse engineer it from a properly obtained source. An organization should, therefore, take a holistic approach to IP and consider how to leverage all of the different forms that exist, such as trade secrets, patents, publications, trademarks, and copyrights, as each form has different pros and cons.

## More Resources on Valuing Trade Secrets

https://eiexchange.com/content/30-how-much-are-your-trade-secrets-worth-heres-how

# Elevating Risk Management

## Intellectual property underinsured.

The theft of IP is a very real threat, whether it is as the result of industrial espionage, hackers, or a company's own employees. The theft of IP is pervasive and staggering—"the 21st century crime of choice," according to the according to the U.S. Chamber of Commerce's Global Intellectual Property Center. As one executive in the study offered, "it's going to continue to be a challenge because of how quickly you can sell something on the internet, and how quickly you can create a company to start manufacturing something, and by the time we catch up to you and try to start to prosecute, you can close down, take your cash, and open up under another name somewhere else and start all over again. In today's world, it makes it a lot harder to crack down on that kind of thing."

However, one manufacturing executive we interviewed cautioned that "perspective with respect to IP matters is important because we can lose perspective very quickly and we can end up in an extremely expensive fight that far exceeds the value that anybody will ever receive out of that fight." Insurance plays an important role in mitigating these losses.

Aon and the Ponemon Institute's 2019 Intangible Assets Financial Statement Impact Comparison Report highlights a serious gap between companies' efforts to insure intangible assets versus physical ones: companies surveyed devoted four times as much budget to insuring physical assets as they did to intangible assets. <sup>14</sup> That insurance gap is particularly striking given the average potential loss to information assets exceeded that of property, plant, and equipment (PP&E) – \$1.08 billion versus \$795 million, according to the report. At the same time, companies surveyed in the Ponemon Institute study indicated they felt it was more likely they would experience a loss to information assets than to their physical ones. Few companies have a trade secret theft insurance policy and/or a patent liability policy. However, by developing a greater understanding of the value of their intangible assets, organizations will be positioned to adjust their allocation of resources accordingly to insure what is most valuable to them.

Beyond insurance for protecting IP, leading manufacturing companies that say they collaborate closely with their suppliers on a range of production and design issues are growing their profitability much faster than companies that say they only minimally collaborate with their suppliers.<sup>15</sup>

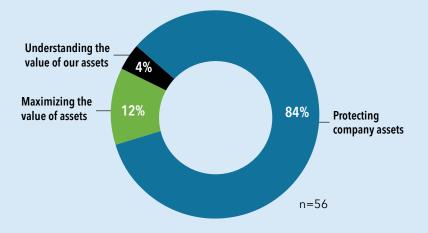
#### **Manufacturers Expect IP Risk Exposure to Rise**

Do you believe your company's exposure to IP risk will increase, decrease or stay the same over the next 24 months?

# 37% No change 60% Increase

#### **Asset Protection the Primary Objective for IP Strategy**

Overall, what is the MOST important objective in your enterprise's IP management strategy?

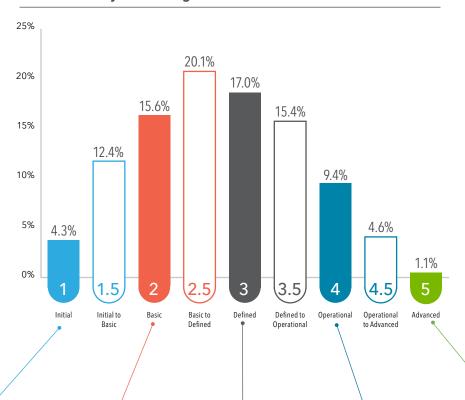


## IP Risk in Your Risk Maturity Score

In 2017, Aon and MAPI collaborated on a research project to evaluate the degree of established risk management best practices as measured by the proprietary **Aon Risk Maturity Index (RMI)** across a cohort of MAPI members. The RMI process was designed to provide executives with insights and guidance on best-practice tools and techniques to help improve their risk governance and overall approach to risk management. The findings revealed that the MAPI cohort averaged a "Defined" level of risk maturity on the scale illustrated below.<sup>16</sup>

While not specifically intended to measure IP best practices, we suggest that by using the same RMI scale, the surveyed group for this report would score the equivalent of a "Basic to Defined" maturity level suggesting ample room for improvement in their approach to IP risk management.

#### **Aon Risk Maturity Index Rating Structure**



#### Initial/Lacking

Component and associated activities are very limited in scope and may be implemented on an ad-hoc basis to address specific risks

#### **Basic**

Limited capabilities to identify, assess, manage and monitor risks

#### Defined

Sufficient capabilities to identify, measure, manage, report, and monitor major risks; policies and techniques are defined and utilized (perhaps inconsistently) across the organization

#### **Operational**

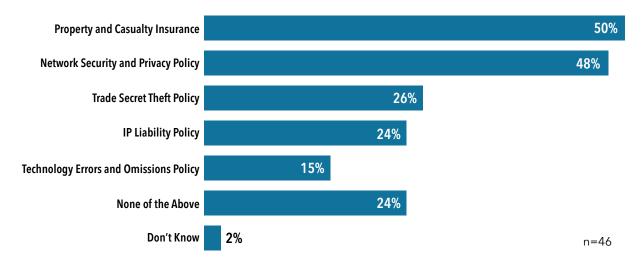
Consistent ability to identify, measure, manage, report and monitor risks; consistent application of policies and techniques across the organization

#### Advanced

Well-developed ability to identify, measure, manage and monitor risks across the organization, process is dynamic and able to adapt to changing risk and varying business cycles; explicit consideration of risk and risk management in management decisions

#### **Insurance and Other Policies Lead Risk Mitigation Strategies**

In protecting your balance sheet from infringement claims, how does your company mitigate the loss of IP and trade secret theft?



Source: 2019 MAPI and Aon IP Management in Manufacturing Survey

Insurance is complementary to a robust risk management approach. Linking asset and risk data analytics will lower an organization's Total Cost of Risk (TCOR). When considering insurance protection for IP risks, the insured should make an informed decision as to how much, and what type, of insurance to purchase and how that insurance relates to the larger risk management issues.

Insurers often consider the applicant's network security and response plans when underwriting and pricing the trade secret risk. Alignment with best-practice standards will help the insured withstand patent infringement or trade secret theft. Furthermore, alignment can also result in more favorable insurance terms and conditions because insurers favorably consider proactive cybersecurity when underwriting cyber risks.<sup>17</sup>

#### **Uneven Implementation of Risk Mitigation Tactics for Mission-Critical Assets**

To mitigate risk to your company's most important, mission-critical assets ("crown jewels") what steps does your company take currently?

Create agreements, policies, procedures, and records to establish and document protection	92%
Establish physical and electronic security and confidentiality measures	81%
Take corrective actions and continue improvement of policies and procedures	62%
Assess risks to identify and prioritize trade secret vulnerabilities	42%
Establish due diligence and ongoing third-party management procedures	38%
Train and build (risk mitigation) capacity with employees and third parties	38%
Monitor and measure corporate efforts	25%
Institute an information protection team	21%



# INSURANCE PLAYS AN IMPORTANT ROLE.

"PERSPECTIVE WITH RESPECT TO IP MATTERS IS IMPORTANT BECAUSE WE CAN LOSE PERSPECTIVE VERY QUICKLY, AND WE CAN END UP IN AN EXTREMELY EXPENSIVE FIGHT THAT FAR EXCEEDS THE VALUE THAT ANYBODY WILL EVER RECEIVE OUT OF THAT FIGHT."

- MANUFACTURING EXECUTIVE

# Conducting a Gap Analysis

Multiple policies in a manufacturer's insurance portfolio may apply to IP risks. However, it is important to establish a clear understanding of each policy when considering incremental IP-specific coverage. By conducting a gap analysis, as illustrated below, manufacturing leaders will be better positioned to gain insight into existing IP coverage, where it is excluded, and where it may overlap. The analysis can therefore help manufacturers identify needs for new or incremental coverage for negotiation. Additionally, it can inform better coordination in the drafting of the "Other Insurance" across policies so that these maximize coverage by ensuring that the order of coverage application is clear.

#### Sample Gap Analysis

Exposures	General Liability	E&O/ Professional Liability	Cyber Liability	Media Liability	Kidnap and Ransom	Reps and Warranties (Transaction Based)	Intellectual Property Liability
IP Liability Risks							
Patent Infringement						<b>✓</b>	<b>V</b>
Trade Secret Misappropriation						V	V
Trademark/Trade Dress/Trade Name Infringement	Negotiable	Negotiable	<b>V</b>	Negotiable		<b>~</b>	~
Copyright Infringement	Negotiable	Negotiable	<b>V</b>	Negotiable		V	V
Third Party IP disclosure/release (breach of NDA/confidentiality agreement)		Negotiable	<b>V</b>	Limited		<b>~</b>	~
Contractual Indemnities of IP Risk		Negotiable	Negotiable	Negotiable		V	V
Breach of IP license agreement				Limited		V	Negotiable
IP Ownership Risks							
IP ownership representations						<b>✓</b>	<b>V</b>
Loss of IP value due to theft/ missappropriation/other loss						<b>~</b>	Negotiable
IP Enforcement costs						<b>V</b>	Negotiable
Loss of IP due to legal challenge/Loss of Revenue						<b>~</b>	Negotiable

Source: Aon

DISCLAIMER: All descriptions, summaries or highlights of coverage are for general informational purposes only and do not amend, alter or modify the actual terms or conditions of any insurance policy. Coverage is governed only by the terms and conditions of the relevant policy.

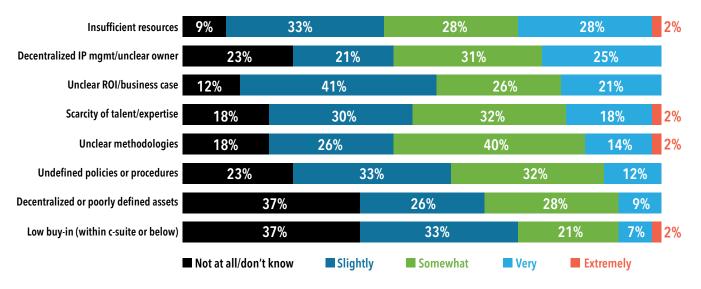


# **Concluding Thoughts**

Rather than admiring the problem and the nuances of IP risk, Aon and MAPI research provides a path forward for manufacturers to tackle challenges in a structured way, starting with cataloging and managing trade secrets and improving the organization's resilience. Barriers are many but remain relatively low hurdles along the important path to protecting the enterprise.

#### **Moderate Barriers to Overcome in Managing IP**

How significant are each of the following barriers to managing IP effectively across the company?



Source: 2019 MAPI and Aon IP Management in Manufacturing Survey

Calculating the true global value of trade secrets theft is difficult given that different industries measure this type of theft in different ways. Some companies avoid reporting incidents for fear of reputational and financial damage. A rapid rate of innovation has caused trade secrets to become an increasingly preferred method of protection, particularly when speed is of the essence. Of all the IP rights, trade secrets are the least understood but can provide the most significant competitive advantage if properly protected, valued, and exploited.

"Most of the CEOs we speak to recognize the importance of trade secrets to their businesses, but we still see too many who have their 'aha!' moment when their company becomes a victim. Only then do they realize that they should have done more to protect their trade secrets," according to Mark Elliot, executive vice president of the U.S. Chamber of Commerce's Global Intellectual Property Center.<sup>18</sup>

In conducting proper cataloging of trade secrets, a formal assessment of security controls, and a valuation of trade secrets, organizations are well on the path to protecting profitability and market capitalization while lowering their total cost of risk.

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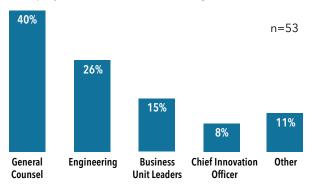
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## About the Research

Aon and MAPI jointly launched a study in 2019 to understand the state of intellectual property strategy, valuation, and risk management practices at U.S. manufacturers. An online survey was deployed to 52 MAPI member executives at large companies (primarily \$1B revenue and above) who represented functional areas relevant to IP management, including legal departments, research & development, and finance. Surveys were supplemented by qualitative interviews. Respondents reflect the range of organizational structures for IP management within manufacturing companies.

#### **Organization Leader of IP Management**

Who plays the lead role in IP management?



Source: 2019 MAPI and Aon IP Management in Manufacturing Survey

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