

ipPerformance

2020 Intellectual Property Program Performance Metrics Benchmark Scorecard



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Cross industry report includes:

Section 1: All companies

Section 2: Revenue less than \$1 Billion

Section 3: Revenue between \$1 Billion and -\$5 Billion

Section 4: Revenue greater than \$5 Billion

2020 IP Program Performance Metrics Benchmark Scorecard

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About the Intellectual Property Program Performance Metrics Benchmark Scorecard Report

Welcome to the *Intellectual Property (IP) Program Performance Metrics Benchmark Scorecard Report*. This unique report analyzes data compiled from companies that have participated in our benchmarking studies over the past three years. This metrics report brings together more than 90 benchmark metrics that leading companies use to evaluate their intellectual program and make tactical and strategic decisions.

The report includes three types of data - operational internal and external spending, operational efficiencies, research & development effectiveness and portfolio management and strategies. ipPerformance normalizes the data for easy comparisons with your internal data.

This report can be sub-grouped by the variables we analyze. The most common sub-groups are based on industry, company revenue, R&D spending, or invention activity.

The Importance of Benchmark Research

Companies are continually in a race without a finish line. Competition is fierce and the leading companies are constantly looking at improving. IP benchmarking reports are tools that enable you to evaluate all aspects of your IP program. It helps you calibrate your practices to improve your efficiencies and effectiveness.

Benchmarking

What is Benchmarking?

- Benchmarking helps companies define their capabilities with regards to a database of other organizations performing similar tasks. It provides a reference point to determine who is the best.

Why should my firm Benchmark?

- Firms benchmark their capabilities in order to further understand their performance and areas where improvements can be made. The data will provide best practices as measured by actual practices in the market.

How do I Benchmark my firm?

- Benchmarks are conducted by gathering crucial data regarding your firm's practices and comparing that information against a database of other organizations with certain information normalized in order to provide an accurate picture of the results.

Data Integrity

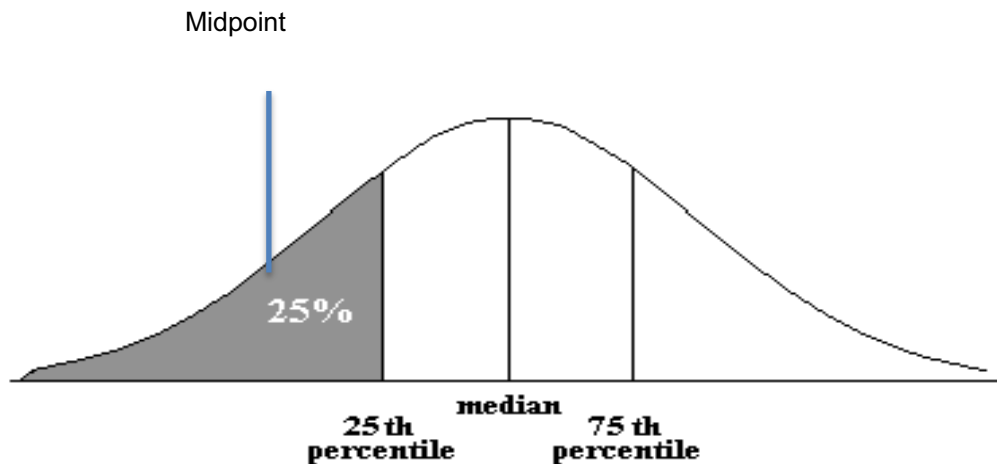
In order to ensure the integrity and accuracy of the survey results and performance metrics presented herein, ipPerformance Group employs the following data integrity practices:

- *Collection.* ipPerformance collects and aggregates data from their online survey collecting data from companies around the world, which is maintained in electronic form in the ipPerformance database center.
- *Normalization.* In order to create the analysis sections of the report, data from numerous fields within the ipPerformance data set is normalized and parsed for detailed aggregation and analysis.
- *Scrubbing.* Misspellings (e.g., missing zeros) and other data errors occur periodically in the initial database entries. This is particularly true within the highly relevant "revenue," "R&D expenses" and "costs" fields, into which the participants may have inadvertently entered extra numbers, too few numbers or text with numbers. In order to ensure accurate values and subgroupings, ipPerformance employs significant technological and human capital to "clean up" misspellings, transpositions and other errors in these data fields.

Statistics Explanation

The statistics provided are organized into quartiles based on data arranged in order of increasing magnitude/values. The quartiles represent four ranges organized into three values and reflect a normal distribution. The median reflects the midpoint of the data, the 1st quartile is the midpoint or middle value of the lower half and the 3rd quartile is the midpoint or middle value of the upper half of the data.

Below is an example. The greyed area represents the 1st quartile and the value we provide would be the midpoint in the range.



Profile Metrics

Company/Department IP Profile	1st Quartile	Median	3rd Quartile		Company
Annual Revenue (\$Millions)					
Annual R&D Spending (\$Millions)					
Number of Invention Disclosures Received from Employees					
Number of U.S. and non-U.S. Original (nonprovisional and provisional) Patent Applications					
WW R&D (Engineering) Personnel Employed					
Number of Active Matters (Disputes, oppositions, invalidation proceedings, litigations, arbitrations, etc.) Pending Worldwide					
Development Projects - internal "major" development					

Business Alignment

Portfolio Management - Patent Use	1st Quartile	Median	3rd Quartile		Company
Products (Products/Services)					
Licenses (Revenue)					
Blocking/Defensive (Used to defend market position/prevent market entry)					
Future use (Products/Services)					

Portfolio Management

Patent Portfolio	1st Quartile	Median	3rd Quartile		Company
Total Number of Pending Cases (Worldwide patent applications)					
Total Number of Granted Patents Held Worldwide					
Total Number of Patent Families					

Patent Portfolio - Area Filing	1st Quartile	Median	3rd Quartile		Company
Number of Countries Patents Filed In (convention filing)					
Number of Countries Patents Filed In (strategic/high commercial value)					

Patent Portfolio Age - Vitality	1st Quartile	Median	3rd Quartile		Company
Number of Patents held less than 3.5 years					
Number of Patents held for 3.5 – 7 years					
Number of Patents held for 7.5 – 11 years					
Number of Patents held for 11 – 15 years					
Number of Patents held more than 15 years					

Patenting Ratios	1st Quartile	Median	3rd Quartile		Company
Percentage of Internally Generated Invention Disclosures that Resulted in the Filing of a Patent Applications					
Percentage of Prospective Inventors that Submitted Invention Disclosures					
Percentage of Patent Applications that began with Filing a Provisional Patent Application					

Patent Family Ratios	1st Quartile	Median	3rd Quartile		Company
Patents Worldwide to Patent Families					
Patent Applications to Patent Families					

Financial Management

IP Operations Expenses	1st Quartile	Median	3rd Quartile	Company
Annual IP Operational Expenses				
Annual Patent Operational Expenses				
Patent Operation Expenses Itemization (Percentage)				
Law Firm Professional Fees (non-litigation)				
Maintenance/Annuity				
All other Patent Office Fees (PTO)				
Operations, Salaries and Staffing Costs				
Patent Research or Analytic Professional Fees				
Litigation				

Outside Counsel Management

Outside Counsel Usage and Cost	1st Quartile	Median	3rd Quartile	Company
Percentage of Initial (Priority) Nonprovisional Patent Applications Prepared by Outside Counsel				
Percentage of Annual Patent Prosecutions Handled by Outside Counsel				
Average Cost per Simple Patent Application Preparation				
Average Cost per Simple Patent Application Prosecution				
Average Cost per Complex Patent Application Preparation				
Average Cost per Complex Patent Application Prosecution				
Average Cost per Opinion				

Outside Counsel Efficiencies	1st Quartile	Median	3rd Quartile	Company
Average time in hours spent by in-house patent attorney/agent(s) for reviewing a patent application 1st draft prepared by IP law firm(s)				
Average time spent in hours by in-house patent attorney/agent for reviewing an office action response prepared by IP law firm(s)				
Average cycle-time in days for 1st Draft preparation by IP law firm: from sending them the invention submission to receipt of 1st Draft review				
Average cycle-time in days for Patent Application Filing by IP law firm: from 1st Draft received to Patent Application Filing				

Personnel & Operations Management

IP Department Operations Analysis	1st Quartile	Median	3rd Quartile	Company
WW IP Expenses as Percentage of Revenue				
WW IP Expenses as Percentage of R&D Spending				
Patent Expenses as Percentage of Revenue				
Patent Expenses as Percentage of R&D Spending				

IP Operations - Personnel	1st Quartile	Median	3rd Quartile	Company
Number of Patent Attorneys				
Number of IP Attorneys (include Patent, Contract, Litigation, IP (e.g., TM, Copyright), and Licensing)				
Total Support Staff				

2020 IP Program Performance Metrics Benchmark Scorecard

Patent Attorney Cycle Time/Productivity	1st Quartile	Median	3rd Quartile		Company
Average time spent by Patent Attorney for drafting a patent application					
Average time spent by Patent Attorney for reviewing a draft prepared by outside counsel.					
Average time spent by Patent Attorney for prosecuting a substantive office action					
Average time spent by Patent Attorney for reviewing an office action response prepared by outside counsel					

Patent Attorney Efficiencies	1st Quartile	Median	3rd Quartile		Company
Average cycle time in days from invention disclosure submission to patent filing decision					
Average cycle in days for 1st draft preparation by inside patent attorney/agent(s) from patent filing decision to 1st draft patent application review					
Average cycle in days for patent filing by inside patent attorney/agent(s) from 1st draft completion to filing of patent application					

2020 IP Program Performance Metrics Benchmark Scorecard

Patent Attorney/Agent Workload Analysis/Yields	1st Quartile	Median	3rd Quartile	Company
Invention Disclosures per Patent Attorney				
Invention Disclosures per Patent Attorney/Patent Agent				
Patent Applications (Originals/Priority U.S. and non-U.S.) per Patent Attorney				
Patent Applications (Originals/Priority U.S. and non-U.S.) per Patent Attorney/Agent				
Worldwide Pending Patent Applications (Including foreign equivalents) per Patent Attorney				
Worldwide Pending Patent Applications (Including foreign equivalents) per Patent Attorney/Patent Agent				
Active Patent Matters per Patent Attorney				
Development Projects per Patent Attorney				
Development Projects per Patent Attorney/Patent Agent				
Total Number of Worldwide Patents Held (Including foreign equivalents) per Patent Attorney				
Total Number of Worldwide Patents Held (including foreign equivalents) per Patent Attorney/Agent				
Number of Patent Families per Patent Attorney				
Number of Patent Families per Patent Attorney/Agent				
R&D Spending (\$M) per Patent Attorney				
R&D Spending (\$M) per Patent Attorney/Agent				
Revenue (\$M) per Patent Attorney				
Revenue (\$M) per Patent Attorney/Agent				

Innovation Management

R&D Profile and Yield	1 st Quartile	Median	3 rd Quartile		Company
Development Projects - internal "major" development					
Percentage of Active Projects of Significant/High Commercial Value					
On average, Percentage of IDs that are of Significant/High Commercial Value per Project					

R&D Effectiveness Analysis	1 st Quartile	Median	3 rd Quartile		Company
Invention Disclosures per Inventor*					
Patent Applications per Inventor*					
Total Number of Invention Disclosures per Million Dollars of R&D Spending					
Total Number of Original Patents filed per \$1M of R&D spending - Patent Efficiency					
Revenue (\$M) per Patent Application (Priority/Original)					
R&D Spending (\$M) per Patent Application					
R&D Spending (\$M) per Invention Disclosure					
Revenue (\$M) per Invention Disclosure					

* Inventor is defined as person expected to submit an invention idea

Risk Management

Risk Management	1st Quartile	Median	3rd Quartile	Company
Number of New Product Clearances and Freedom To Operate Studies Conducted				
Patent/Technology-Related Infringement Notice Letters Initiated (Annual)				

Learning and Knowledge Growth

Learning and Knowledge Growth	Average (Weighted)	Company
Number of Topics in IP Training Program		
Stakeholder knowledge rating - basic IP concepts:	Rating (Scale 1-5)	
Senior Management		
Middle Management		
R&D Management		
R&D (Engineers/Scientists)		
Marketing		
Commercial Procurement/Supply Chain		
Sales Team		
Manufacturing		

Notes:

- Development projects refer to active internal “major” development projects (new product or process).
- Patent applications refers to original or priority patent application filings (includes: Number of original conventional priority patent applications (utility/process) first filed in the U.S. and outside (nationals); Number of PCT priority applications filed in U.S.; Number of PCT priority applications filed outside U.S.; Number of provisional patent applications first filed in the US; Number of design patent applications first filed in the U.S.; and Number of industrial design applications first filed in non-U.S. jurisdictions.
- Corporate or business unit patent attorneys are aggregated
- Significant/High Commercial Value projects or inventions have an impact on growth, erosion prevention, or cost reductions. For example, this change may be expected or realized in revenue of more than 5%, market share of more than 5%, operating margins of more than 5%, and cost reduction of 10%.

2020 IP Program Performance Metrics Benchmark Scorecard

Additional Metrics (Internal Benchmarking)

By business unit

By Technology

geographic region

by type (product, manufacturing, design, etc.)

Comparison of number of patents filed for you versus your competitors (based on filings that have published) – current year, prior year, 3 yr trend

Comparison of number of patents issued for you versus your competitors

Patents rejected as a percentage of total patents filed (how is this defined) final rejections

Industries Reported

- Aerospace/Defense
- Automotive
- Biotechnology (Instruments, Analytics, or Diagnostics)
- Biotechnology - Other
- Building Products or Construction
- Chemicals or Materials
- Consumer Electronics
- Computer Equipment
- Computer Software
- Consumer Household Durables
- Consumer Nondurables (excluding Food)
- Containers or Packaging
- Electrical Equipment
- Electronic Components and Equipment
- Financial and Insurance Services
- Food, Beverages, and Tobacco
- Machinery (Industrial or Agricultural)
- Medical Equipment and Supplies
- Office Products or Automation
- Petroleum or Energy
- Pharmaceuticals
- Photographic and Scientific Equipment
- Semiconductors
- Telecommunication Products
- Telecommunication Services
- Travel, Leisure, or Entertainment
- Research and Development
- High Technology

- Industry combinations (Examples)
- Chemicals/Pharmaceutical/Biotechnology/Medical Devices
- Consumer Products/Food & Beverage
- Electrical/Electronics/Components
- Chemicals/Petroleum/Energy
- Pharmaceutical/Biotechnology
- Software/Computers/Peripherals

More on ipPerformance Group

ipPerformance Group, Inc. (www.ipperform.com) is the leading intellectual property advisory company. We enable our clients to apply best practices and measure IP performance by drawing upon our knowledge of more than 450 intellectual property management benchmarks, all from Global 1000 companies. Armed with this knowledge, you will be able to solve complex intellectual property business problems and measurably enhance your ability to build value, manage risk, and improve performance in an intellectual property-driven world. The following outlines some of our other offerings.

ipPerformance's assessments apply its extensive experience with high-performance organizations to provide an objective and powerful perspective on the leadership behaviors that will have the greatest effect on sustained intellectual property program performance.

Intellectual Property Management Program “Yard Stick” Review

The “Yard Stick” is a comprehensive assessment of your intellectual property asset management program. It includes evaluating policies, procedures, workflows, software, people, operational performance metrics (costs, cycle-time, value), training program, and stakeholder interactions. We provide an in-depth review of your operation, identify issues or concerns, and provide you best practices and a roadmap with improvement opportunities.

Intellectual Property Management Performance Metrics Scorecard Review

An Intellectual Property Performance Metrics Scorecard is an effective performance metrics tool for communicating value, process efficiencies, and financial management to top management. The scorecard charts financial management, business alignment, portfolio management, risk management, people management, innovation management, and learning and knowledge growth. In addition, we offer workshops to help you develop a measurement program tailored to your unique organizational needs, and construct a scorecard that provides your organization with strategic and operational metrics to help guide business decisions.

Intellectual Property Center of Excellence (IP Knowledge Center)

The IP Center of Excellence is an intellectual property asset management intranet portal system and content solution. This online solution incorporates ipProcess Manager, our comprehensive and detailed intellectual property program policies, forms, and procedures based on best practices that are customized to conform to your company's environment. ipProcess Manager enables your organization quickly to establish robust, accessible, and documented controls for all aspects of your intellectual property program.

Intellectual Property Advantage: Portfolio Evaluation

ipPerformance will assist you to organize, classify, and evaluate your IP portfolio. Our methodology enables your organization to manage your assets better for value identification, cost reduction, litigation support, improved asset access and understanding, and for reporting and communications. It enables you effectively to understand your portfolio.

Intellectual Property Advantage: Process Review and Roadmap

ipPerformance works with you to evaluate current processes and objectives against best practices. We then develop a “should be” map that illustrates improvement opportunities that align with your business strategy to create value, improve quality, and reduce costs. Your organization will benefit from our extensive experience applying best practices and understanding cultural change.

Intellectual Property Online Training Solutions for Stakeholders

ipPerformance Group offers an extensive line of online eLearning training courses on intellectual property. These courses will help your company's business and technology professionals develop the skills they need to create, protect, manage, and monetize intellectual property.

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Our eLearning curriculum reflects a diverse set of intellectual property asset training courses. We cover everything from improving basic understanding of intellectual property to exploring strategic considerations of key stakeholders in areas such as marketing, business management, supply chain/commercial management, and technology (R&D).

Inventor Intellectual Property IQ Assessment and Intellectual Property Culture Diagnostic

Establishing and maintaining a strong inventor IP attitude and understanding is vital to inspiring innovation and gaining valuable invention idea submissions. ipPerformance will assist your company in its effort to obtain and understand factors that will motivate your inventor community to identify and disclose valuable key invention ideas. Moreover, this assessment enables you to identify bottlenecks and key areas for improvement that lead to an increase in valuable inventions and R&D's return on investment.

IP Management Software Selection and Return on Investment Evaluation

Selecting IP asset management software is not a trivial activity. Indeed, it can be an extremely complex process to match software function and capability to your company's needs. Applying a practical and methodical approach will enable you to avoid vendors that cannot fulfill your needs, and the experience of protracted delivery deadlines and inadequate deployment readiness. ipPerformance proprietary Software Solutions Request for Proposal (RFP) and selection tool is comprehensive with over 1,200 attributes. It enables you to prioritize your requirements and evaluate alternative solutions. We can also provide the additional service of walking you through the RFP process.

Strategy Development Workshop

Develop intellectual property strategies that enable your company to achieve business growth goals and sustainable competitive advantage. This one-day workshop has been developed to help intellectual property and business leaders develop and communicate clear IP strategies and tactics that are directly aligned with business strategy.

Drawing on ipPerformance advisors' extensive business and intellectual property experience, this highly interactive course uses lectures, case studies, group exercises, and classroom discussion to explore the foundations of strategic intellectual property. This workshop will provide you with our IP strategy planning guide, which includes an IP strategy framework, templates, techniques, performance metrics, and a perspective to help you develop strategic plans to excel in today's business environment.

ipProcess Manager

Establishing your intellectual property program standard operating procedures can be a time-consuming and complicated process. ipProcess Manager is a comprehensive intellectual property program resource with workflows, procedures, policies, forms, templates, agreements, and flow charts. Our guide covers invention submission, review and decision-making, inventorship, portfolio management and inventory classification, agreement approvals, strategy development, foreign filing decisions, technology release, inventor reward, new product clearance, and handling unsolicited ideas. The ipPerformance ipProcess Manager is designed to help businesses of all kinds take control of their intellectual property asset management operations through consistent implementation of best practices.

Benchmarking Analysis

ipPerformance provides the largest off-the-shelf selection of intellectual property program best practices benchmark reports available. Applying this extensive repository, we can evaluate your program versus peers and best practices. Additionally, utilizing our extensive company network, we can conduct a company-tailored benchmark analysis that enables your organization to investigate specific topics of concern.

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