

Intellectual Property Strategy

Creating Social Value and Corporate Value Through Intellectual Property

Translating Intellectual Property into Social Value and Corporate Value

The Bridgestone Group views intellectual property (IP) as one of its key management resources and is working to strengthen IP management toward becoming a resilient “excellent” Bridgestone by 2030. Through a management method that visualizes and leverages IP, the Group is advancing IP management to directly contribute to establishing business models with high certainty. This also supports the enhancement of the Company’s competitive advantage from both offensive and defensive perspectives. In terms of offense, the Group is accelerating the utilization of IP based on the concept of an IP mix. This IP mix aims to effectively convert IP into social value and corporate value by combining newly created IP with existing IP cultivated in the foundational domain of “producing and selling” Dan-Totsu products, which are considered Bridgestone’s “secret recipe”. From a defensive standpoint, the Group is striving to enhance its ability to identify and respond to risks by visualizing IP in order to increase certainty when looking to expand the premium tire business and the solutions business and venture into exploratory businesses. In designing and building the ideal IP mix, the Group makes use of IP landscapes from two perspectives: an inward-looking IP landscape where we analyze and reinforce mechanisms for converting the Group’s IP to corporate value, and an outward-looking IP landscape where we identify and visualize opportunities and risks from an IP standpoint across the industry and in each business.

» Enhancing IP Management

The Bridgestone Group aims to enhance IP management by focusing on the following three policies.

(1) Take a Holistic View of the Value Chain

The Group promotes IP management by looking at the entire value chain—“produce and sell”, “use”, and “renewal” of tires to raw materials. This includes every aspect from planning, development, and manufacturing to logistics, sales, and recycling. For example, the Group identifies and strengthens IP across the value chain by examining how its competitive edge in logistics, an area where differentiation through IP has traditionally been difficult, can be linked to IP in development and manufacturing.

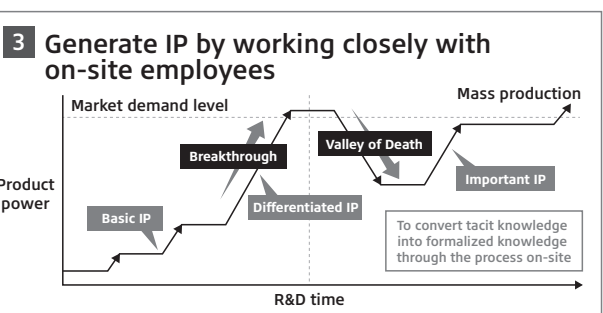
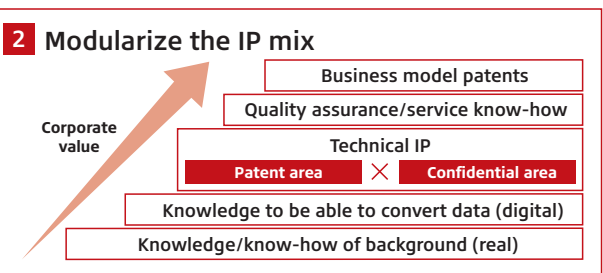
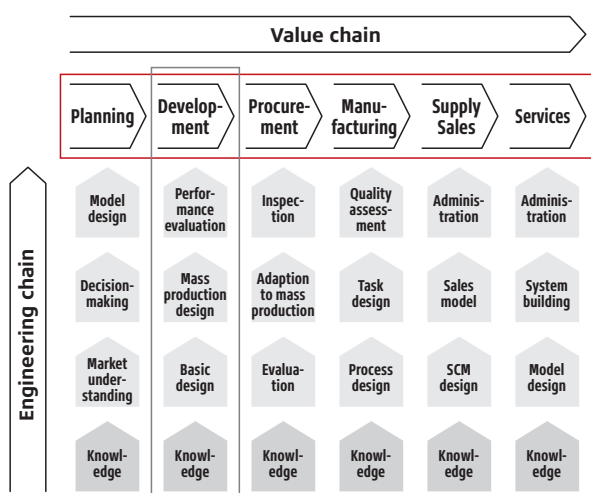
(2) Modularize the IP Mix

The Group identifies clusters or groups of IP assets consisting of knowledge, know-how, and patents that are distributed throughout the value chain. These IP clusters are viewed as modules that can be leveraged to create social value and corporate value. The Group works to strengthen and expand application of these modules so that they can be utilized efficiently and strategically in various solutions businesses.

(3) Generate IP by Working Closely with On-site Employees

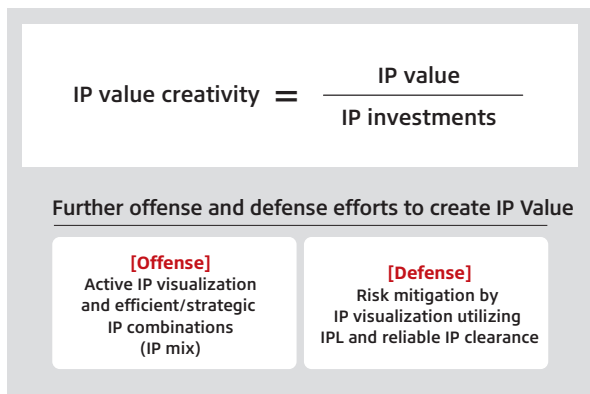
The Group communicates with on-site employees not only in development and manufacturing but also in logistics and sales and service to convert tacit knowledge into formalized knowledge that contributes to business value. This activity to design and build the IP mix form the foundation of IP management.

1 Take a Holistic View of the Value Chain

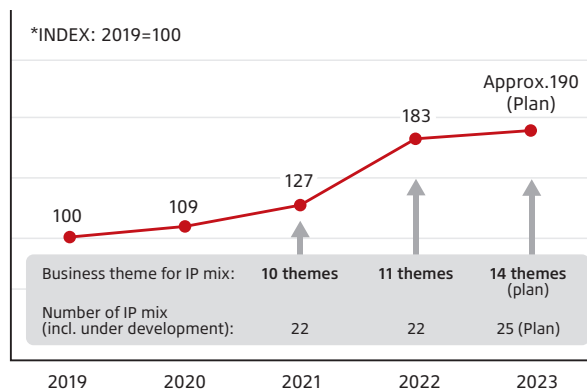


» **Verifying Return on Investment Using ROIC**

The Group has incorporated the concept of ROIC, the most important management KPI in Mid Term Business Plan (2021-2023), into IP management. Specifically, the Group sets results-driven KPIs that measure the contribution to sales generated by leveraging IP and IP revenue as “IP value”. In addition, the Group sets factor-oriented KPIs that measure management efforts from both offensive and defensive perspectives. From an offensive standpoint, the Group views the number of modules in an IP mix which are based on the three masteries in technology and innovation—mastering rubber, mastering road contact, and mastering manufacturing—which are considered our “secret recipe” as factor-oriented KPIs. These can include modules under development. From a defensive standpoint, the Group has introduced the following as factor-oriented KPIs: the ability to secure business flexibility through identification of risks in advance while leveraging micro- and macro-IP landscape capabilities from both inward-looking and outward-looking perspectives; and avoidance of litigation and other IP-related issues. The basic formula for ROIC is used to calculate the Group’s ability to create IP value. The Group almost doubled this results-driven KPI in 2022 compared with 2019 and aims to further improve it in 2023.



• **IP value creativity based on the basic formula for ROIC**



» **IP Activity Case Study: Mining Solutions**

The Group’s mining solutions provide an excellent example of a robust IP mix that has been developed and is functioning to maximize the economic value of overall mining operations based on supporting nonstop vehicle operations and improving productivity. The IP mix is designed to support a platform connecting the real and digital worlds, covering the entire value chain of the mining solutions business. A vast amount of IP generated from our three mastery concepts has been integrated into the Dan-Totsu product Bridgestone MASTERCORE, forming a foundation consisting of thousands of patents and a wealth of knowledge and know-how. Sitting above this foundation is the application layer consisting of the group of patents covering durability, tire wear prediction, etc., and a group of confidential IP supporting these patents. Moreover, there is a business model that brings together all the Group’s solutions including for productivity, safety, and recycling. These three layers make up the IP mix. Development, business, and IP divisions work closely to design and build the IP mix as modules, which ensures that IP is utilized in an efficient and strategic manner, including application to other businesses. The Group is striving to expand application of the IP management approach and techniques used in mining solutions to all solutions businesses.

