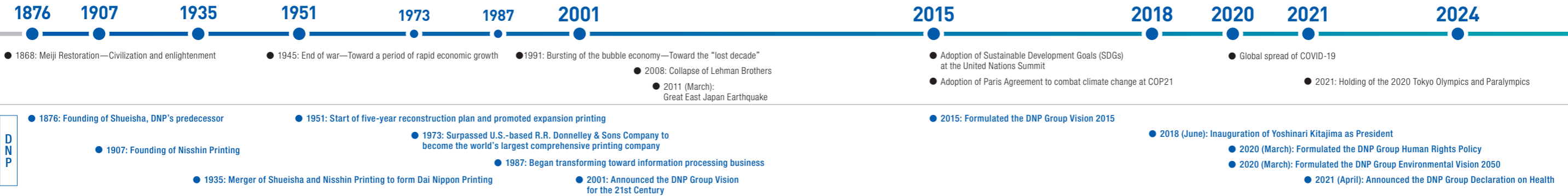


THE DNP GROUP'S VALUE CREATION STORY

A History of Transformation

Transforming our business model from the publication printing business to P&I Innovations



Publication printing business

Comprehensive printing business

Information processing business — Information communication business

P&I Solutions

P&I Innovations

Built diverse printing processes and evolved the strengths of P&I (printing and information)

→ Built the foundation of a technology system based on printing processes



1877
Printed the revised edition of *Self-Help*



1945-49
Handled part of banknote printing as a private company

Promoted "expansion printing" that broadened business domains by means of applying and advancing our printing technologies

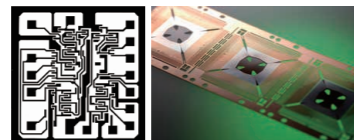
→ Realized Second Corporate Founding toward becoming a "comprehensive printing company," which was rare throughout the world



1951 Advanced into paper container/flexible packaging field and decorative printed materials field



1958 Succeeded in developing shadow masks for CRTs, thus contributing to domestic production of color TVs



1959 Developed vapor deposition masks for transistors (left)
▶ Expanded into business for photomasks for semiconductors

1964 Commenced production of lead frames (right)

1964 Handled printed materials for the Tokyo Olympics

1970 Commissioned to plan exhibitions for nine pavilions at the Osaka Expo
▶ Expanded planning-related business

Expanding business by deepening DNP's unique hybrid strengths in both *monozukuri* (manufacturing) and services, analog and digital technology, and reality and virtual reality



1972 Full-scale start of Computerized Typesetting System (CTS) (left)

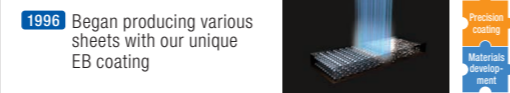
1983 Developed smart cards (right):
Commercialized Japan's first rewritable smart card
▶ Toward gaining the top market share in Japan

1985 Developed world's first electronic dictionary on CD-ROM



1985 Developed dye-sublimation thermal transfer printing media—started production: Expanded business due to the spread of photo sticker machines
▶ Toward gaining the top global market share

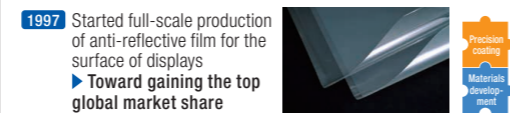
1985 Developed LCD color filter production technology



1996 Began producing various sheets with our unique EB coating



1997 Developed inline aseptic filling system for PET bottles



1997 Started full-scale production of anti-reflective film for the surface of displays
▶ Toward gaining the top global market share



1999 Commercialized battery pouches for lithium-ion batteries
▶ Toward gaining the top global market share

DNP aims to realize its Third Corporate Founding by directly engaging with society and consumers, solving social issues and providing value that meets expectations and needs.

We develop various types of products and services that consider the global environment and people's health.



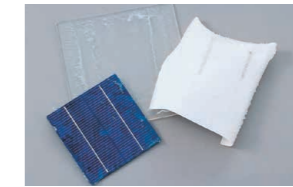
We are expanding DNP's eco-friendly packaging (top), upgrading and expanding our lineup of products with antibacterial and antiviral properties (bottom), and developing and selling low-reflection face shields and low-reflection film partitions.



2018 Developed a stretchable thin display in collaboration with the University of Tokyo: Skin electronics device that attaches to skin



2014 Developed multifunctional insulation box that keeps the internal temperature constant for an extended period of time without using a power supply.
2019 ▶ Awarded the 28th Grand Prize for Global Environment Award



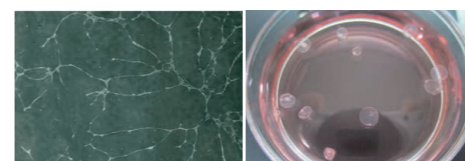
2003 Developed photovoltaic module components
2024 ▶ Started providing sheeting to improve power generation of bifacial photovoltaic modules



2017 Developed curved resin glazing: Used in sunroofs and other areas to reduce automobile body weights



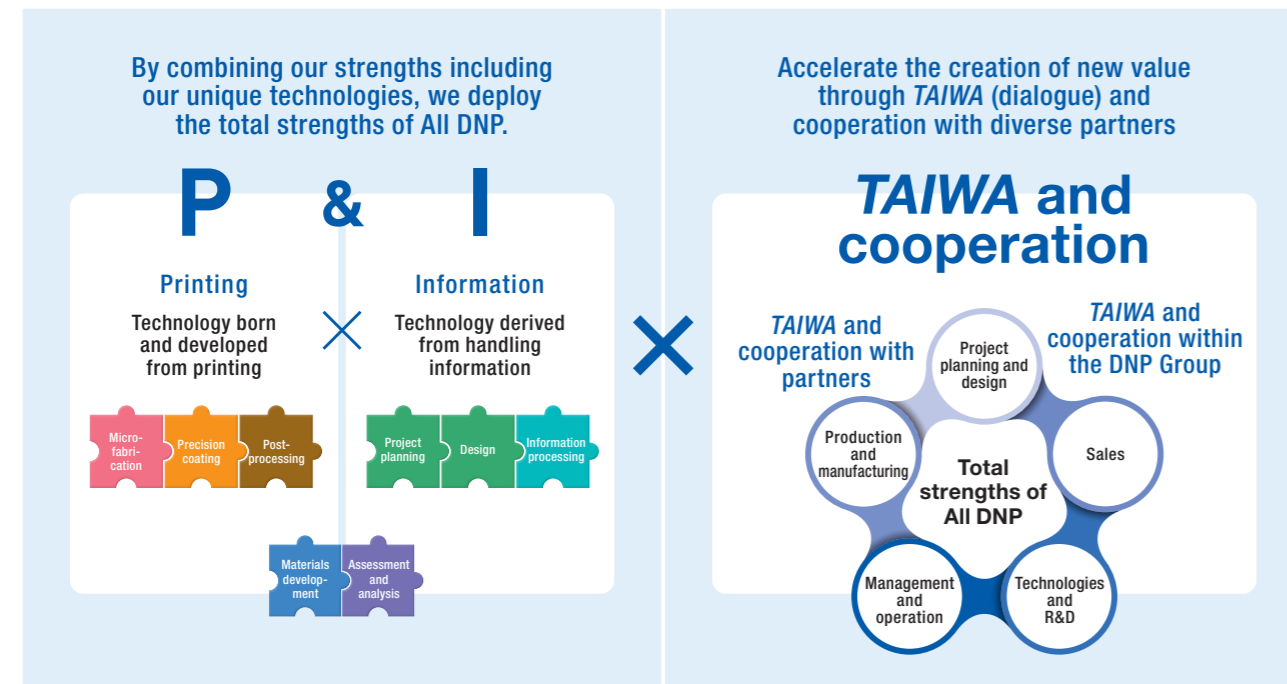
"The SIAA mark is displayed on products for which quality control and information disclosure are undertaken in accordance with the guidelines of the Council of Antibacterial Product Technology based on the results of evaluations under ISO 22196."



2004 Successfully created capillary patterns (left)
2017 Successfully researched and developed 3D human intestinal organoids "mini-guts" (right)
▶ Toward regenerative medicine business

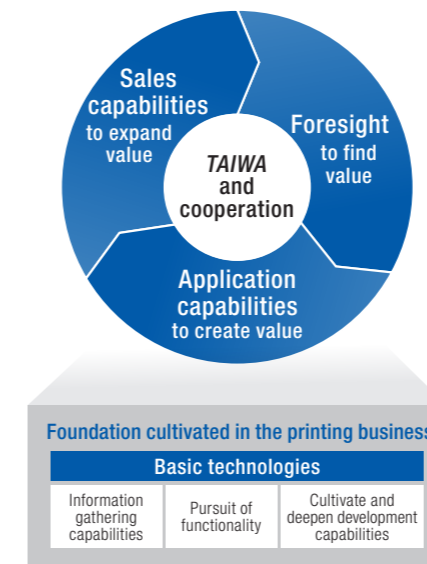
P&I Innovations

DNP leverages technologies cultivated from printing processes that secure top shares for its product groups.



DNP constantly refines its most-advanced diverse proprietary technologies based on printing processes while combining these with its strengths in sales, planning, manufacturing and management to create new value. DNP's unique strengths that it has advanced in P&I (Printing & Information) are unmatched by any other company.

Furthermore, we will strengthen collaboration with a variety of external partners to increase the speed of value creation. There are endless possibilities in combining our strengths and we will realize a "better future" by continuing to take on the challenge of creating unprecedented value that is indispensable to people and society by deploying the total strengths of All DNP.



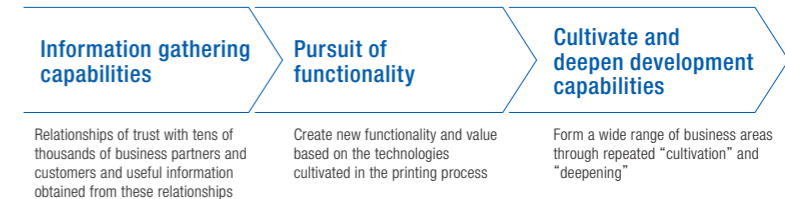
Ability to create new value

Anticipate the future and quickly provide the value created by applying our own technologies to the entire world



Foundation cultivated in the printing business

Highly functional products and services and relationships of trust with business partners and customers



Application and development of technology based on printing processes

	Technologies cultivated through printing processes	Application of technologies
1	Editing Project planning and design	We design optimal communication strategies and output formats from the dual perspectives of sending and receiving information. We also build optimal processes for publishing and marketing, packaging and decorative printed materials and electronic components. We are evolving our editing capabilities to create value such as by developing services that improve experiential value for consumers and introducing Design Thinking.
2	Manuscript submission and layout Information processing	We arrange diverse information formats such as text, illustrations, video, and audio and convert and process these into the most-optimal formats. During the preprocessing stage (pre-press), we also handle optimal color management and manage large volumes of data. We are also deepening our security-related technologies, safely and securely handling important information, and strengthening response capabilities for global businesses.
3	Film making and platemaking Micro-fabrication	We create high-precision plates that serve as original printing plates. By further advancing the technology for this process, we form micro-patterns on such substrates as metals, glass and plastics. We are creating a wide variety of products that include leading-edge electronics products and anti-counterfeiting holograms by independently evolving our etching (corrosion) and molding (material processing) technologies.
4	Printing Precision coating	Ink is applied to printing plates in accordance with various printing methods and coated thinly, uniformly and precisely onto paper or film. We also focus on various applications, such as expanding substrates to metal or glass or creating a multi-layer structure. DNP's proprietary electron beam (EB) coating technology is also the result of this process. This technology provides functions such as light and temperature control, water and oxygen barriers, weather resistance and scratch resistance.
5	Binding and post-processing Post-processing	There are technologies derived from various processing processes during the creation of the final form of books, magazines and other items. These are applied to making a wide variety of products into shapes that are easy to use by consumers. These technologies are also outstanding for use in three-dimensional processing such as die cutting and assembly; packaging for such items as foods, beverages and daily necessities; the development of systems for the aseptic filling of contents; and the inspection, measurement and analysis of various products.

Advancement toward products

- Various types of process design and optimization
- Various types of approaches such as Design Thinking
- Robotic Process Automation (RPA):
- Utilization of artificial intelligence (AI)

- Information security
- XR communication business
- Smart cards/settlement and authentication
- Digital archive
- Data centers
- Metaverse
- Color management
- Shueitai fonts, etc.

- Metal masks for OLED display manufacturing
- Photomasks for semiconductors/nanoimprint master mold
- Various electronic devices (MEMS, lead frames, etc.)
- Various types of security-related products, etc.

- Various types of optical films for displays
- Battery pouches for lithium-ion batteries
- Various types of functional films using EB coating
- Photographic print materials
- Packaging
- Decorative printed material

- Aseptic filling systems (PET bottles, pouches, etc.)
- Various three-dimensional containers (cartons, laminates, etc.)
- Multifunctional insulated box
- Bookbinding and appendices
- POP and other promotional materials, etc.

Building a strong business portfolio

2020

[New business] Content & XR communication
2021 Promoted XR communication business that fuses real and virtual spaces to create new experiences and economic spheres

[New business] Medical & healthcare
2023 Through a strategic business alliance with CMIC HOLDINGS, we promoted integrated manufacturing, from active pharmaceutical ingredients to formulations, and developed value-added pharmaceuticals.

[Growth-driving business] Digital interfaces
2024 Expanded production capacity of metal masks for manufacturing of OLED displays, which have the world's top-share: Started manufacturing large-sized products compatible with 8th-generation glass substrates

[Growth-driving business] Semiconductors
2023 Established joint venture Nanoimprint Solutions with SCIVAX: Responded to mass production needs of nano-imprinted products both in Japan and overseas

[Growth-driving business] Mobility and industrial high-performance materials
2019 Developed next-generation decorative panels for automobile interiors (left)
2019 Developed sheet-type coil for wireless charging of EVs (right)

[Stable business] Imaging communication
2024 Launched sales of the world's lightest-class 8-inch double-sided photo printer

[Stable business] Information Security
Undertake various types of businesses related to authentication/security with the aim of creating a society where everyone can live comfortably and safely.

2030

FUTURE

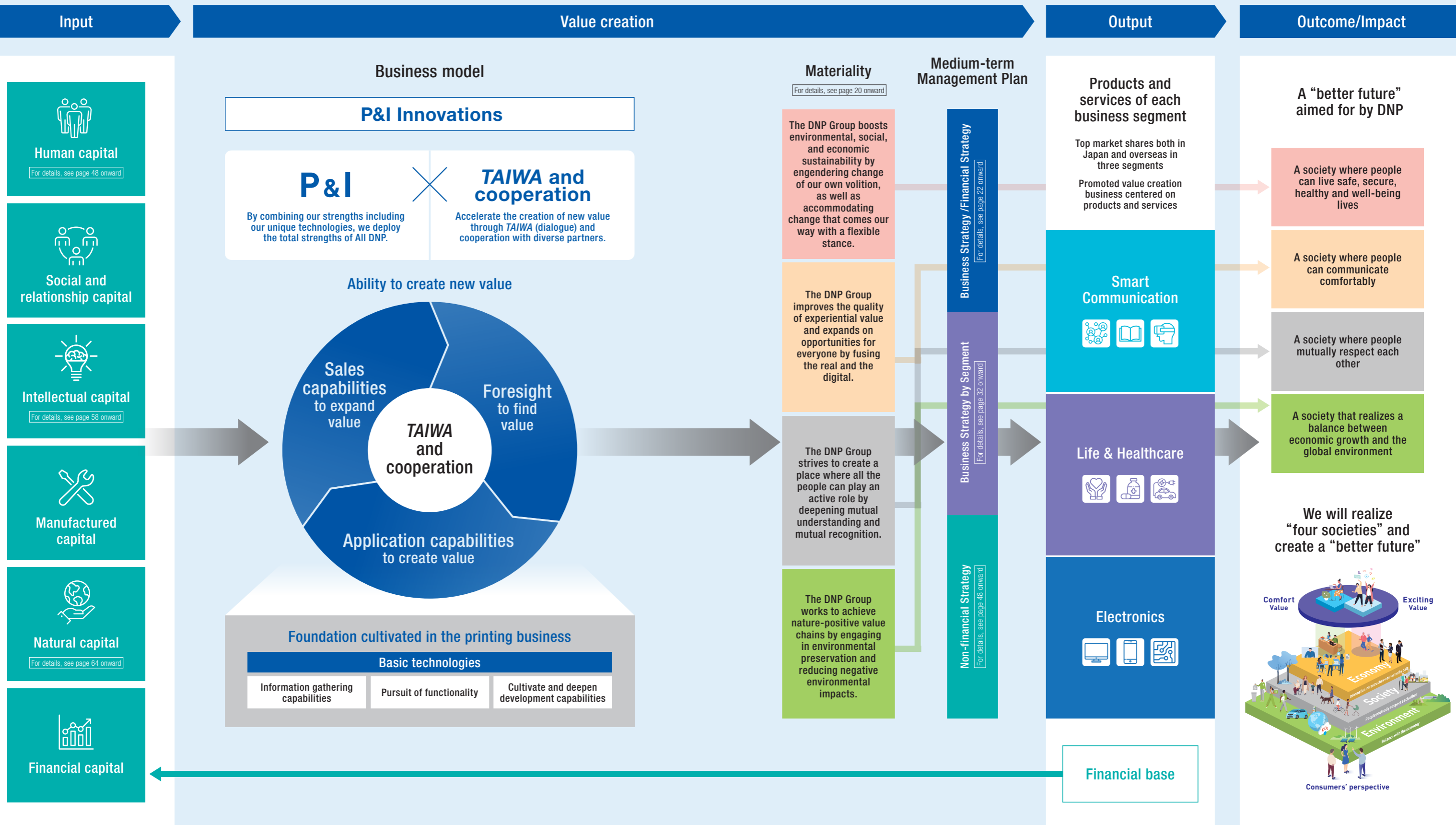
Strengthened collaboration with various partners

Strengthened collaboration with various partners

Value Creation Process

Realizing a “better future” and increasing corporate value through P&I Innovations

For DNP to create a “better future,” we are always anticipating the future and initiating change on our own, and through TAIWA (dialogue) and cooperation we are combining our strengths to create new value and quickly provide this to the world.



Materiality

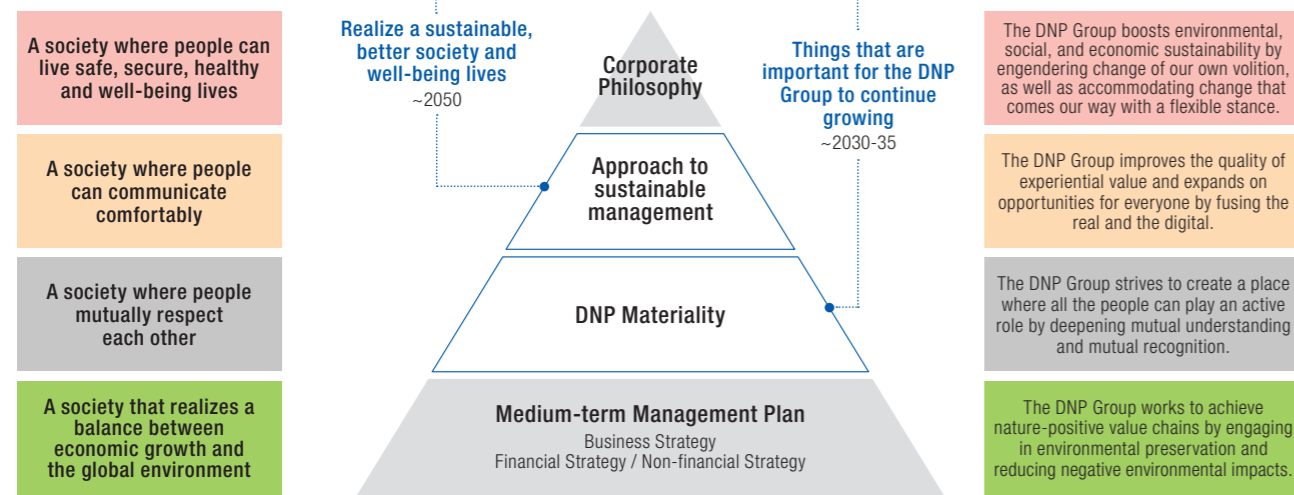
DNP identifies materiality to realize the “better future” it envisions.

Based on the Corporate Philosophy, the DNP Group aims to realize “a sustainable, better society and well-being lives” as a sustainable management concept and is taking the initiative in conducting business activities to create a “better future.”
To realize the four interrelated societies that it aims for as

a “better future,” in March 2024 DNP identified materiality as important for it to continuously grow together with society by specifying what DNP should do and what value it will create with an eye toward 2030-35.

☑ DNP Group's Philosophy and Materiality

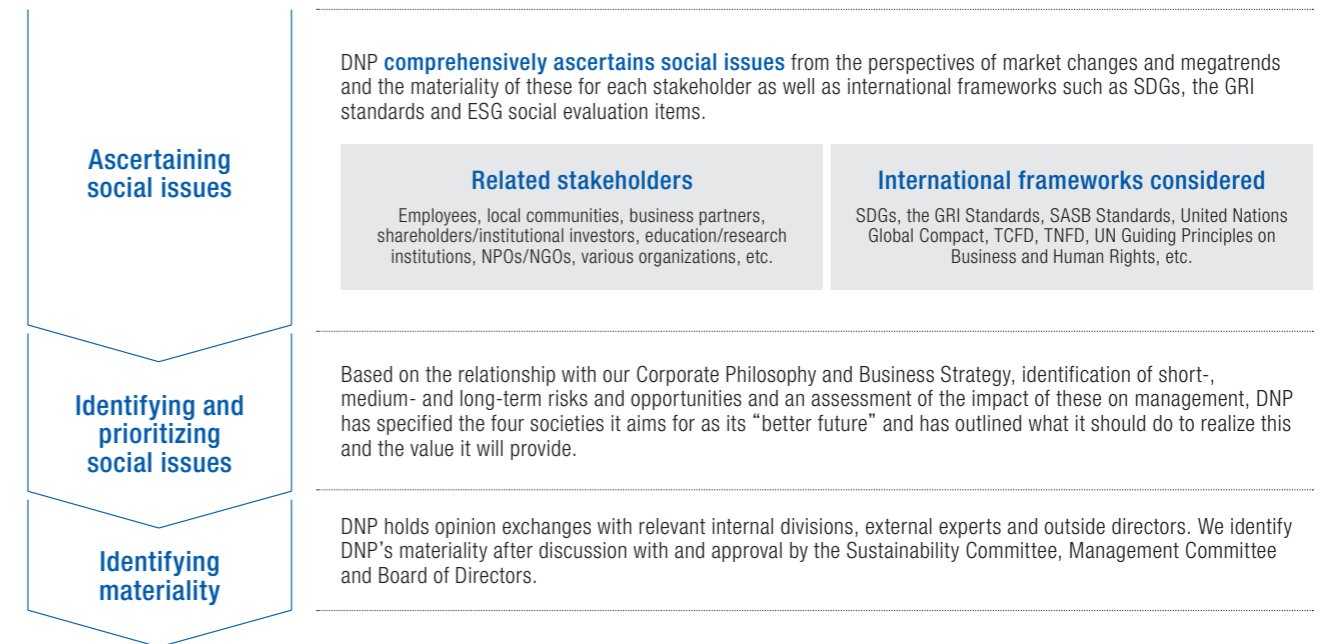
- A “better future” aimed for by DNP



Process for identifying materiality

In identifying materiality, DNP comprehensively ascertains social issues and megatrends related to the environment, society and the economy, and evaluates and analyzes medium- to long-term risks (variable factors) and the impact of these on our business based on factors such as the impact on our own business

activities, the value we can provide, and our strengths. Considering these external trends, DNP has specified the four types of societies that it aims for, and to realize these we have specified what DNP should do and the value it should provide and identified these as materiality.



Business activities based on materiality

As business activities based on materiality, we are promoting cross-company new value creation, primarily in our focus business areas, through the evolution and cultivation of the strengths of DNP's unique Printing & Information (P&I).

Concurrently, we are strengthening our business base and thoroughly managing risks as we minimize negative impacts from the dual perspectives of increasing corporate value and strengthening business competitiveness.

☑ Impact of extracted risks (variable factors) on business activities and reflecting these in business opportunities

	Risks (variables) closely associated with business activities	Expected impact on business	Reflect in business opportunities
Economic risks	<ul style="list-style-type: none"> Market changes, acceleration of development of new products and technologies Acceleration of DX and establishment of a global network, etc. Geopolitical influences, rapid changes in various economic indicators Changes in financial and information infrastructures Depletion of/shortages/restrictions on resources, etc. 	<ul style="list-style-type: none"> Changes in business structure, intensifying competition in new businesses and development Human rights violations in using AI, spread of false information Stagnation and sudden changes in economic and consumer trends, changes in the supply and demand balance Intensifying threats to information security Impacts on stable procurement, soaring prices, etc. 	<ul style="list-style-type: none"> Value creation centered on focus business areas, strengthening collaboration with partners Commercialization/efficiency enhancement through AI innovation, accelerate AI utilization Integration of cyberspace and physical space Provision of highly reliable and transparent information Strengthen IT governance, sophisticate security measures, etc.
Social risks	<ul style="list-style-type: none"> Labor shortages, employment mobility Diversity, changing conditions for people to live comfortably Globalization of supply chains, geopolitical risks, etc. 	<ul style="list-style-type: none"> Difficulties in securing and developing specialist human resources, rising labor expenses Diversification of values, awareness of diversity Increasing supply chain risks, including human rights Strengthened regulations, manifestation of the impact of geopolitical risks, etc. 	<ul style="list-style-type: none"> Build a robust human resources portfolio Eliminate labor shortages by improving operational efficiency Promote D&I, utilize diverse human resources, and respect the work environment and human rights Improve reliability by enhancing the transparency of the supply chain, etc.
Environment risks	<ul style="list-style-type: none"> Intensifying disasters and increasing water risks due to climate change Accelerating plastic pollution and biodiversity loss Accelerating the transition to being nature positive, carbon neutrality and a circular economy Expanding environmentally positive markets, accelerating technology innovation, etc. 	<ul style="list-style-type: none"> Suspension of operations and disruption of supply chains due to social infrastructure destruction Tightening of regulations on GHG emissions, etc. Expansion of reuse and recycling, rise in demand for switching to alternative materials Reforming business structure toward being nature positive Intensifying competition in new businesses and development, changing market trends, etc. 	<ul style="list-style-type: none"> Deal with natural disasters through BCP and BCM, multiple production bases Provide low-carbon products, services and products made from alternative materials, and effectively utilize resources Expand markets through early technology development and product design changes, etc.

A “better future” aimed for by DNP

	A society where people can live safe, secure, healthy and well-being lives	A society where people can communicate comfortably	A society where people mutually respect each other	A society that realizes a balance between economic growth and the global environment
Value creation	<ul style="list-style-type: none"> The DNP Group boosts environmental, social, and economic sustainability by engendering change of our own volition, as well as accommodating change that comes our way with a flexible stance. 	<ul style="list-style-type: none"> The DNP Group improves the quality of experiential value and expands on opportunities for everyone by fusing the real and the digital. 	<ul style="list-style-type: none"> The DNP Group strives to create a place where all the people can play an active role by deepening mutual understanding and mutual recognition. 	<ul style="list-style-type: none"> The DNP Group works to achieve nature-positive value chains by engaging in environmental preservation and reducing negative environmental impacts.
Smart Communication <small>For details, see page 32 onward</small>	Content & XR communication			
Life & Healthcare <small>For details, see page 32 onward</small>	Medical & healthcare		Mobility and industrial high-performance materials	
Electronics <small>For details, see page 32 onward</small>	Digital interfaces			Semiconductors
Strengthening of Human Capital <small>For details, see page 48 onward</small>	Support for career autonomy of employees and strengthening of organizational capability / Hiring, personnel assignment and reskilling based on human resource portfolio			
	Health and productivity management that increases the happiness of employees		Promotion of D&I utilizing diverse individuality	
Strengthening Intellectual Capital <small>For details, see page 58 onward</small>	Creation of new businesses and enhancement of technological strengths / Global rollout of technological strengths / Strengthening of stable businesses and cultural reform			
	Sophistication of DX infrastructure			
Initiatives for Environment <small>For details, see page 64 onward</small>				Build a decarbonized society, a recycling-oriented society and a society in harmony with nature.
Thorough risk management to support sustainable growth Themes: Fair Operating Practices, Human Rights and Labor, Environment, Responsible Procurement, Product Safety and Quality, Information Security, Corporate Citizenship				