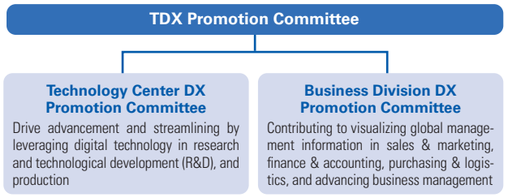
Advanced Business Management by Utilizing Digital Technologies

TDX promotion project

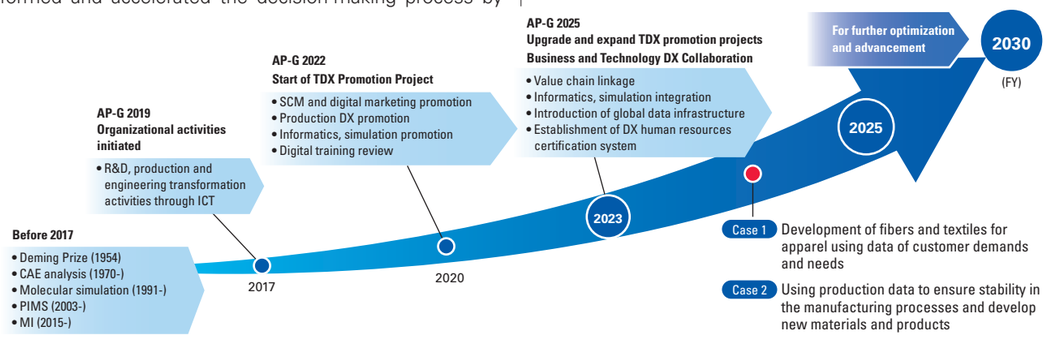
Toray has placed high priority on advancing business management through Digital Transformation (DX) and is globally rolling out the Toray Digital Transformation (TDX) promotion project which was launched throughout the organization in FY 2020. In order to facilitate reviews and discussions regarding Group-wide efforts to promote DX, Toray established the TDX promotion committee, chaired by the President, and put in place the subordinate Technology Center DX promotion committee as well as the Business Division DX promotion committee. The Company is advancing the group-wide TDX promotion project in addition to departmental initiatives.



Promoting DX in a way closely tied to the workplace

Toray has long been proactive in utilizing data and advanced digital technologies. As exemplified by the introduction of CAE analysis in the 1970s and Plant Information System (PIMS), Toray has actively promoted development through the use of advanced digital technologies; the acquisition of data; and improvements and enhanced efficiency based on that data. Under the TDX Promotion Project launched in 2020, we are expanding and accelerating our activities. Aiming to create products and services meeting the needs of society and a growing number of customers, and to achieve our goals of bolstering cost competitiveness and realizing enhanced management, we are promoting the use of digital technologies and data in a way closely tied to the workplace.

In the previous Medium-term Management Program period from FY 2019 to FY 2022, we successfully transformed and accelerated the decision-making process by improving the efficiency and sophistication of our Supply Chain Management (SCM). We also bolstered efficiency and sophistication in materials development through the use of Materials Informatics (MI). Under Project AP-G 2025, we are focused on enhancing and expanding our activities, strengthening collaboration in the value chain, and improving the sophistication and efficiency of our operations through the integrated use of informatics and simulations. In this way, and regardless of which field of work, we are accelerating the advancement of DX in all possible areas, with our efforts aimed at ensuring visualization through the advancement of digitization and digitalization, improving the level of data utilization, advancing the ability to effectively utilize data for predictive and optimization purposes, and promoting the efficiency and sophistication of operations using technologies such as generative AI.



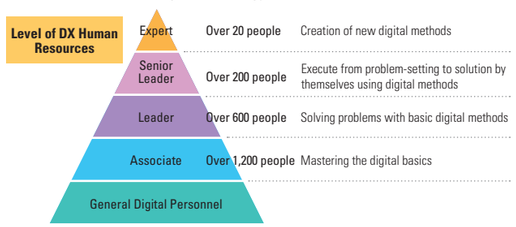
Development of DX human resources

We are also focusing on the development of DX human resources so as to better support the TDX Promotion Project. In order to develop human resources that can accurately understand the workplace, effectively use digital technologies as a tool, and take the lead in driving improvements, we expanded our training programs from FY 2020, and we launched a DX human resources certification system in FY 2023.

We are working to train more than 2,000 DX personnel in the Group by the end of FY 2025, and we are making steady progress toward the achievement of this goal.

Train more than 2,000 DX personnel in the Group

- Focusing on the development of senior leaders and leaders who are familiar with both the frontlines and digital technology

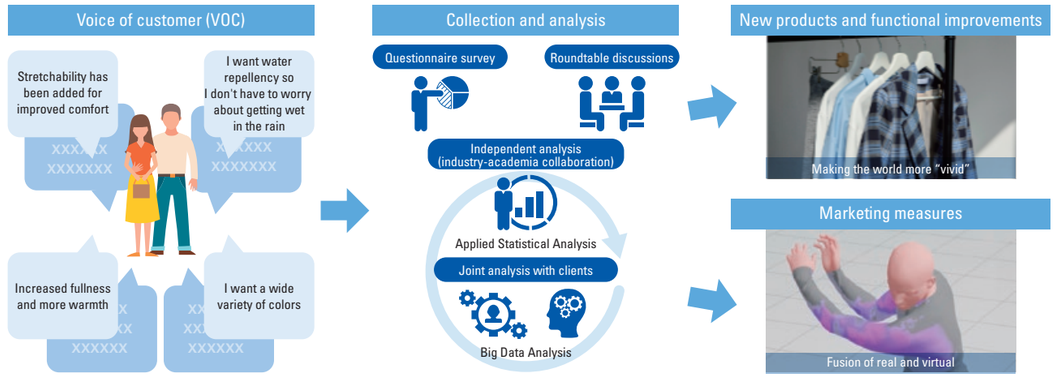


Case 1

Development of fibers and textiles for apparel using data of customer demands and needs

We actively compile, on our own and in collaboration with our retail customers, the opinions and feedback of the customers that are the end users of our apparel products. We then use this "Voice of Customer" (VOC) information to better develop materials. More specifically, we gather valuable VOC information using questionnaires and roundtable discussions, analyze that information, and use that analysis as we consider updating existing products and developing products which do not yet exist. Through the incorporation of even deeper data analysis, made possible by industry-academia collaboration, we have been able to advance the development of sustainable materials and develop popular products, including high water-repellant outerwear and hybrid materials with natural fibers.

We come up with marketing measures, not only by developing products, but also by considering how best to convey to our customers the functions and features that give our products value and how we can make an impression. In one example of such marketing measures, a virtual simulation using 3D computer graphics can effectively allow the visualization for how comfortable an item would be to wear. Our global development activities also include analyzing VOC from overseas locations with different climates and cultures, which is of great use in the development of new materials.



Case 2

Using production data to ensure stability in the manufacturing processes and develop new materials and products

We have accumulated a vast amount of data collected from manufacturing processes, research, and prototyping, and are using this data in each product field to link process innovation with the research and technological development of new materials and products. We are also promoting measures aimed at advancing the development of innovative new products and driving process improvements based on mechanism clarification. As an example, Toraylight™ NV is an artificial kidney device used during dialysis and is made up of countless hollow fibers. For this device, we used data analysis, simulations, and other digital technologies to identify defects and clarify the mechanisms involved, which has allowed us to improve our equipment and conditions for manufacturing. We are also promoting the use of these digital technologies in real-time data analysis and predictive maintenance. In addition, what we learn from data analysis and the clarification of mechanisms is being used to acquire the knowledge necessary to develop reduced diameter fibers and other compact next-generation products that will reduce the burdens endured by dialysis patients.