Interview with Senior Corporate Executive Officer Hiroshi Nakatani

Acceleration of Innovation in Manufacturing



Hiroshi Nakatani Representative Director, Senior Corporate Executive Officer

How do you approach innovation?

We strive to innovate along three axes. The first involves directly providing value to customers. This is what we call "product innovation," which aims to transform the products that we provide to customers, such as by creating new products. In addition, we have recently begun focusing on "solution innovation," which aims to transform the services that we provide to solve the issues that our customers face.

The last axis is "process innovation," which aims to transform work processes, such as design and manufacturing. Through this axis, we strive to accelerate the development of new products and services, which indirectly provide value to customers. Process innovation is often conducted behind the scenes, and the results of these efforts often go unnoticed from the outside, but it plays an important role in supporting companies' sustainable growth.

Tell us about the process innovation initiatives.

Our process innovation initiatives strive to transform business processes across the entire value chain. The basis for this is our company-wide deployment of TQM (Total Quality Management) promotion activities. In addition to instilling our management policies throughout the company as well as creating an environment that facilitates companywide collaboration towards achieving goals, we are improving management quality by standardizing daily operations and constantly improving them through the PDCA cycle. In the engineering chain, which is part of the development and design process, we are engaging in reforms we call K-DPX (Kawasaki Design Process Transformation) promotion activities, which aim to standardize and sophisticate the development and design processes. In addition, in the supply chain, which is part of the manufacturing process, we continue to promote KPS (Kawasaki Production System), and we have pushed forward with production improvement initiatives that aim to reduce workloads and cut down on in-process inventory.

Recently, the scale of the global market has been expanding due to the development of emerging markets, and the market environment has changed significantly. There is an urgent need to accelerate innovation activities to maintain our competitive edge.

How do you plan to accelerate process innovation?

As part of our DX (Digital Transformation) strategy, we are promoting the areas of "DX for customers, "DX for businesses," and "DX for employees." Among these, in the domain of "DX for businesses," we are working to accelerate process innovation by actively employing digital technology. By doing so, we aim to streamline the value chain, optimize the overall process, and enhance individual work processes.

With regard to manufacturing at production sites, by introducing digital technologies such as various sensors and electronic tags, robots and automated equipment, AI for processing big data, the implementation of CPS (Cyber Physical System) that optimizes all processes in real time, high-speed networks (local 5G, etc.), cloud systems, and visualization using XR technology, we aim to develop technologies that enable us to iterate the PDCA cycle of conventional on-site improvement activities in a way that is accurate, fast, and visible. Through these efforts, we endeavor to optimize operations throughout the entire supply chain, including at our factories; to dramatically improve productivity by introducing innovative production methods; and to realize a working environment where people from all backgrounds can work comfortably.

Closing comments

We have established Group Vision 2030 as our goal for 2030, and we aim to contribute to the global market by providing solutions to issues that society will face. As part of our efforts to do so, we aim to achieve process innovation in manufacturing by utilizing digital technology, thereby revolutionizing manufacturing.