

CTO Message

Complete NEXT 2025 through Companywide Application of the Business Creation Process based on Established Technology Management to Enhance Corporate Value



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OMRON's Business Creation Process Capitalizing on Technology Management Expertise

OMRON positions the SINIC Theory, proposed by our founder Kazuma Tateishi to predict future developments, as a management compass. Through innovation driven by social needs, we have achieved growth by addressing societal challenges. Under our NEXT 2025 initiative, we will continue pursuing innovation to tackle the three key issues outlined in the long-term vision SF2030, launched in fiscal 2022: "Achievement of Carbon Neutrality," "Extension of Healthy Life Expectancy," and "Realization of a Digital Society." However, in order to put OMRON back on a sustainable growth trajectory in a rapidly deteriorating business environment, we must now integrate the expertise gained through the process of establishing "Technology Management" into business development under NEXT 2025.

[> SINIC Theory](#)

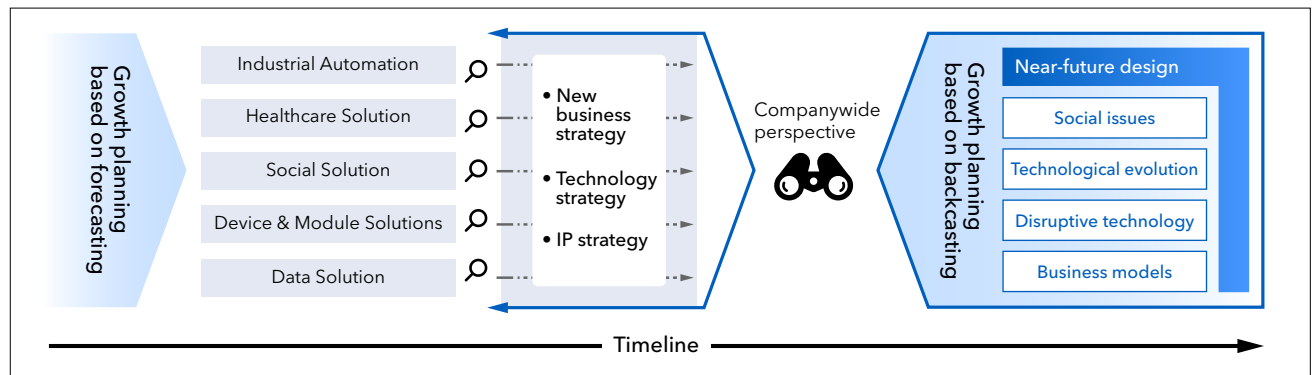
Since taking on the role of CTO, I have been focused on the challenge of establishing technology management. Technology management emphasizes growth planning from two perspectives, forecasting and backcasting, both grounded

in "near-future design," which is a concrete depiction of the near-future society. Business, technology, and intellectual property strategies are then formulated and implemented based on this framework (See [Figure 1](#)). Three organizations are dedicated to technology management.

The first organization is the Innovation Exploring Initiative HQ (IXI), which is a platform for OMRON's innovation. The second is the Technology and Intellectual Property HQ, responsible for evolving OMRON's core technologies, "Sensing & Control + Think," and for formulating and implementing strategies for intellectual property and intangible assets. The third is OMRON SINIC X Corporation (OSX), which promotes research through open innovation, guided by near-future design. During the recent years of rapid change, these three organizations have worked to establish a process for agile creation of new businesses and technologies by backcasting from near-future design. Through the initiatives of IXI and OSX, new businesses and technologies are beginning to sprout that could help resolve social issues.

For example, in its initiatives to evolve the business model from one based on "products" to one based on the

Figure 1 OMRON's Technology Management Based on Backcasting and Forecasting



“combination of products and services,” IXI has launched new businesses, including services that support the independence of the elderly and the digital transformation (DX) of manufacturing sites. The newly established Data Solution Business HQ (DSB), which is in charge of evolving OMRON’s business model, is promoting initiatives aimed at further growth.

While the Technology and Intellectual Property HQ focuses on developing core technologies to achieve business growth and reinforcement, OSX has steadily accumulated research outcomes utilizing cutting-edge AI and robotics. Currently, OSX is strengthening collaboration with customers and business divisions to implement these research outcomes in society. Intellectual property and intangible assets determine “competitive advantage” and “sustainability” driven by the business strategy, the business model, and the technology strategy.

In utilizing intellectual property and intangible assets, we have adopted ambidextrous IP activities by combining “Exclusive to Other Type” and “Sharing & Resonating Type” policies to implement both a closed strategy and an open strategy with partners (See [Figure 2](#)). This ambidextrous

approach is effectively employed in building a patent network for OMRON’s sensing technology and in implementing the Health & Productivity Management Alliance. In light of our challenges to date, I believe that technology management is essential for establishing a business creation process. This involves formulating concrete business, technology, and intellectual property strategies by backcasting from near-future design, involving partners who can share in the benefits of these strategies together with OMRON, and firmly linking these elements into a business model.

Management Issue to be Addressed under NEXT 2025: Reestablish a Growth Strategy from the Customer’s Perspective

While new businesses and technologies have begun to emerge based on established technology management, an issue that has come to light in the current downturn is the decline in development productivity of existing businesses. This stems from placing too much emphasis on a strategy that concentrated our resources on customers and businesses in specific industries, despite the rapidly changing market

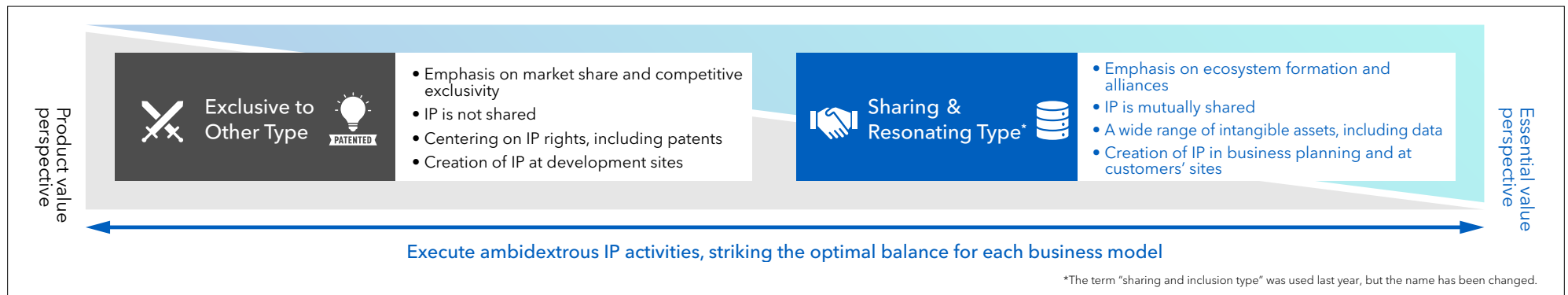
environment and evolving business models. Although the strategy yielded good business results for targeted industries and customers, we were unable to grasp the wide range of customer needs quickly and accurately. As a result, regrettably, we were unable to introduce products meeting market requirements.

In addition, because the development process was time-consuming and cumbersome, development themes took too long and we lagged behind competitors. In essence, OMRON’s essential issue was that we placed too much emphasis on product-out product planning and development to meet the immediate needs of specific customers, rather than forecasting from the customer’s perspective and formulating growth and product strategies accordingly.

Strengthen Collaboration with Business Divisions and Leverage Technology Management Capabilities to Support Completion of NEXT 2025

Under NEXT 2025, head office divisions are deeply involved from the outset, participating in discussions as each business division formulates its growth strategy based on forecasting. Growth strategies, product planning, development themes,

Figure 2 Ambidextrous IP Activities



etc. are being reviewed from the ground up. By incorporating the technology management expertise that we have been cultivating from a backcasting perspective, we will strive for innovation driven by social needs from the customer's perspective. Let me mention some specific initiatives. Previously, each business division formulated a growth strategy based on forecasting and collaborated with the Technology and Intellectual Property HQ to strengthen core technologies, intellectual property, and intangible assets. However, under NEXT 2025, instead of leaving growth strategy planning solely to individual business divisions, collaboration with the head office divisions, which have established technology management, is being further strengthened. So, the entire company is working as one to build a pipeline that tightly links business and technology. For example, in the rebuilding of the Industrial Automation Business under NEXT 2025, the Senior General Manager of the Technology and Intellectual Property HQ and I are actively involved in the Product and Technology Strategy task force, driving the restructuring of the strategy based on the processes and expertise we have cultivated in the course of technology management based on backcasting. Co-creation with partners is also an effective option to increase the pace of business. Previously, co-creation with partners was led by individual business divisions for themes relevant to their areas. Going forward, in order to gain further results, we will also actively invest the head office budget and resources to accelerate these efforts. In terms of technology strategy, the Technology and Intellectual Property HQ, as the responsible unit, has appointed technology officers and formulation of a technology strategy for each business division has started. To avoid falling into product-driven technological development in each business-planning, sales & marketing, and engineering work together to connect the supply chain and the engineering chain, ensuring that a technology strategy firmly linked to the business strategy is formulated. The technology strategies

of individual business divisions are then compiled and integrated into a companywide technology strategy. In the development of multiple businesses driven by social needs, which is a characteristic of OMRON, we aim to identify high-impact technologies that contribute to differentiation across businesses and concentrate management resources on R&D expected to have a high return on investment. We have also initiated reform of the companywide development structure that consists of three tiers—research, technology development, and product development—and are aligning the execution process with the characteristics of our business model, providing value to customers.

Development of Human Capital for Technology Management for the New Era is Critical to Realizing SF2030

We are committed to completing NEXT 2025 by restructuring the forecasting-based growth strategy, as outlined above, and accelerating innovation driven by social needs from the customer's perspective through both forecasting and backcasting. In technology management, we have focused on development of "architects" capable of formulating business, technology, and intellectual property strategies. In addition, we will develop "visionary human capital" who can chart the course of our growth strategy. This is because, to ensure OMRON's sustainable growth, it is essential to have human capital who can design the near future based on the SINIC Theory, sensitively grasp changes in society, and create a vision for the entire business creation process by connecting diverse information and people. These individuals must be able to understand and interpret the essence of customer value and technology, bridging the gaps between society (customers), business, and technology. In terms of technology strategy, increasing the speed from research to social implementation requires the capability to identify the essence of customer issues, recognize the value of research outcomes, and formulate hypotheses that

challenge conventional wisdom. This is not something that can be achieved by simply relying on generative AI. To cultivate human capital with these capabilities, the educational programs that have traditionally been planned by each business division for young employees are no longer sufficient. Instead, we need a companywide, systematic approach to human capital development with a clear purpose. This includes rotating young employees through various departments and giving them the opportunity to take on high-responsibility tasks, enabling them to gain experience and build expertise through iterative "trial and learning." With this in mind, we have begun management-level discussions on a program to develop the human capital who will lead OMRON's technology management in the new era.

According to the SINIC Theory advocated by our founder, society will enter a transitional period by 2025, moving from the Optimization Society to the Autonomous Society. OMRON today is also at a turning point in its journey toward realization of SF2030. As CTO, I am committed to forging ahead with OMRON's structural reform to complete NEXT 2025 by further advancing the technology management that we have been working on and ensuring that each employee contributes to innovation driven by social needs from the customer's perspective. Together with our stakeholders, we will continue to create new businesses and technologies that will shape the Autonomous Society.