

SINIC* Theory: Predicting the Future Through the Interrelationships of Science, Technology, and Society

Our founder, Kazuma Tateishi, believed that solving social issues through business to create a better society required the ability to anticipate future social needs. He believed that a company needed a compass to help predict the future. As our compass, Mr. Tateishi formulated the SINIC predictive theory, which analyzes the cycle of interrelationships between Science, Technology, and Society from the beginning of human history and projects the future. OMRON first announced this predictive theory to the world at the International Future Research World Congress in 1970. Since then, the SINIC Theory has always been our compass for projecting into the future.

The basic philosophy behind the SINIC Theory is that the interrelationships among science, technology, and society lead to social change. Let us use the Cybernation Society as an example. We can see how the rise of cybernetics, computer science, and other synthetic sciences in the 1940s became the seeds of electronic control technologies, programming, and other technology. These technologies gave rise to the PC and the internet, leading to the advent of the Cybernation Society. Society demanded more data, along with more accurate and rapid data analysis. These demands forced us to produce CPUs and GPUs

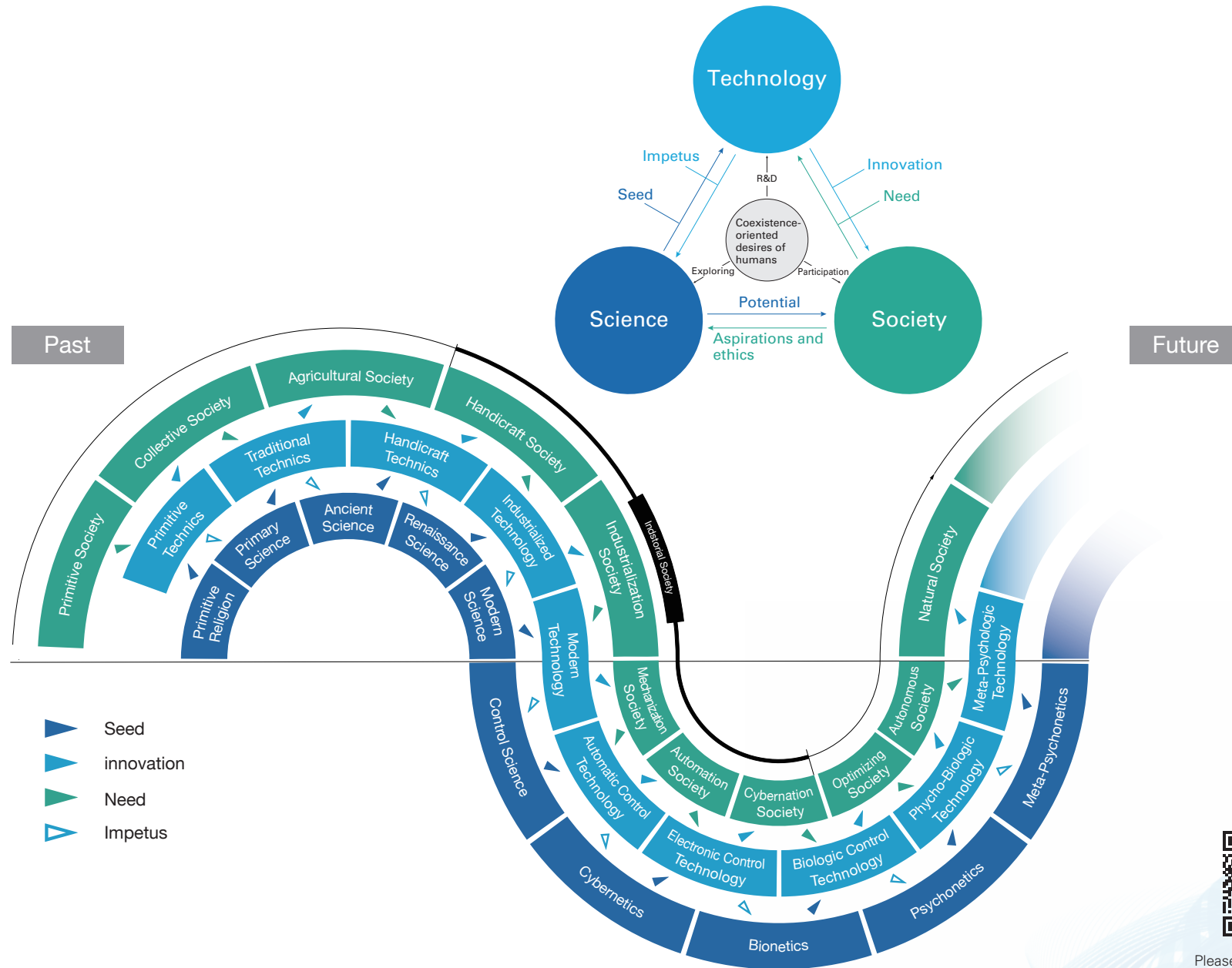
with faster processing power, make advancements in deep learning and other artificial intelligence technologies, and reach higher levels of sophistication in neuroscience and cognitive science.

The current Optimization Society is in a period characterized by a paradigm shift from the Industrial Society to the Autonomous Society. The world is now experiencing the conflict and chaos of the Optimization Society—wars and conflicts erupt, infectious diseases strike without warning, large-scale natural disasters attributable to climate change occur, the limits of economic growth systems oriented to mass production, mass consumption, and mass disposal become evident, and AI and robotics are sources of anxiety. So, apprehension and pessimism about the future are prominent worldwide. In the Optimization Society, the need to eliminate the negative legacy that the Industrial Society has been unable to resolve, has become a major social issue to which the SDGs are a response. However, the Optimization Society is not only about resolving legacy issues. It is also important to anticipate future social needs, preparing for a soft landing in the Autonomous Society in which autonomous individuals will be able to pursue creative lifestyles by relying on

and helping one another while fully demonstrating their own abilities. The hallmark of the Optimization Society is the drive to resolve sustainability issues while simultaneously creating value with an eye to future possibilities. With the SINIC Theory as its management compass, OMRON is working to create an autonomous and decentralized future and a better society by developing technologies that integrate “individuals and society;” “people and nature,” and “people and machines” while maintaining an optimal balance dynamically.

On the other hand, in the near future as the development of science and technology and the pace of social change accelerate, it will be difficult for a single company or organization to realize a better society alone, though it may have been possible in the past. Co-creation initiatives in which autonomous companies collaborate to create will be important. Therefore, it is essential to have a vision of the future with “empathy” to connect partners for co-creation at its core. At OMRON, we openly share the vision of the SINIC Theory and promote co-creation of a better future society by expanding the circle of empathy.

* SINIC: Seed-Innovation to Need-Impetus Cyclic Evolution



Please visit our website to learn more about the SINIC Theory.