From Industry 4.0 to Society 5.0

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Culture is reflected as an essential term that describes the relationship between societies and their past. Although the concept is focused on history, while the culture has a strategic perspective, the word originates from cultivation. As a planted seed grows and evolves, previous experiences linger in memory as a culture. In other words, culture is the product of the future-oriented, immanent cultivation of every moment in which humanity experiences. Culture, thus, provides an essential paradigm that provides an anticipatory pathway such as strategies and directs the future of humankind. The definition of Society 1.0, which has been used to express agricultural communities and culture since the advent of humanity, now gives humanity a new paradigm by yielding to Industry 4.0, an era in which industrialization integrates with technology and becomes an exclusively digital process and culture.

The era that split the Industrial Revolution into stages began with the utilization of steam-powered engines, often referred to as Industry 1.0, eventually followed by Industry 2.0 with the extensive use of steel production and electricity. The effective use of programmable PLC circuits that started to emerge in this process and the Internet's discovery has managed to bring us to Industry 3.0. After Industry 3.0, a phase has arisen in which smart factories started to operate with machine learning, the advancement of artificial intelligence, and the collaboration of machines. It is the Industry 4.0 Period. With Industry 4.0, machines communicating with each other have taken place at every stage of the production process, and these machines have begun to be used in industries in a cheaper, quicker, and less error-free way while at the same time minimizing human input and labor. Industry 4.0 has been actively implemented not only in the industrial sector but also in the service sector. Today, we can see many applications of Industry 4.0 in the fields of education, health, and tourism. While these developments, which started with Industry 1.0, proceed with Industry 4.0, they are preparing to leave their position to a new successor, a new era and culture, Industry 5.0 and Society 5.0.

The concept of Society 5.0 was first discussed at the CeBIT fair held in Germany in 2017. Apart from the previous eras, the focus of society 5.0 philosophy is human. When talking about Society 5.0, the Prime Minister of Japan alluded to the fact that technology should be treated as an aid, not a threat, and that human beings are the focus of this era. This new paradigm emphasizes the importance of quickly evolving technologies in achieving sustainable targets. Within the foundation of the philosophy of Society 5.0, issues such as developing and gaining from the Internet of Things in line with societal interests, managing the virtual world and the physical world in parallel, offering solutions for the aging problem of the world's population, and concentrating on environmental sustainability and remedies to natural disasters are on the agenda. The paradigm of the Society 5.0, which was launched as a Japanese philosophy against Industry 4.0, which was a trend that emerged in Germany, spread exponentially around the world and began to take its place in business manners across different sectors. Digital innovations that are relevant for the welfare of society, such as wearable technologies that focus on people in the health sector, the use of artificial intelligence in education, the mitigation of educational challenges, and the creation of equitable opportunities, are crucial

milestones in the formation of a super-smart society. Society 5.0 certainly shows us where Industry 5.0 is heading. Apart from Industry 4.0, which aims to achieve the most extreme efficiency, Industry 5.0, which has begun to be addressed with Society 5.0, promises to promote the human factor which was neglected during industry 4.0 back into the production process and to create an atmosphere that focuses primarily on human well-being by working cooperatively with humans and machines. It is also clear that the concepts of Society 5.0 and Industry 5.0 will be widely discussed in the aftermath of the Covid-19 pandemic, while people are already questioning themselves with a lot of questions.

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