Taking Humanity's Next Leap with Society 5.0

Hissan Khandakar[a], Khandakar Kamrul Hasan[b]

[a]*Cambridge Assessment International Examinations A Level, British Council, Dhaka, Bangladesh;* hissanbd@gmail.com
[b]*Department of Business Administration, Shanto-Mariam University of Technology (SMUCT), Dhaka, Bangladesh;* kkhasan@gmail.com

"There is nothing permanent except change." — **Heraclitus**, *Greek Philosopher*

In the beginning, mankind was a hunter-gatherer society. Scouring for food and resources, man scattered all throughout the Earth to seek refuge. Eventually, mankind transformed into the agricultural society, forming united civilisations and settling in bustling mega-cities as it wanted to leverage all resources in a particular location. This allowed mankind to learn more about its surroundings, giving rise to the industrial society where technological landmarks ushered in a new era of comfort into these civilisations. With emerging calls for a united globe, and the emergence of the ideas of globalisation, it meant that mankind now wanted to move into the information society, where all the knowledge known to man was simply at his fingertips. These advancements, which were led by scientific and technological innovations, were soon to be transformed into yet another leap into the chapter of humanity – the super-smart society, aptly named Society 5.0, after hunter-gatherer society {Society 1.0}, agrarian society {Society 2.0}, industrial society {Society 3.0}, and information society {Society 4.0} (H-UTokyo Lab., 2020).

Society 5.0 is considered to be 'an initiative merging physical space and cyberspace' (H-UTokyo Lab., 2020) using Extended Reality {XR} technologies. Unlike Mixed Reality {MR} environments, which have already been mainstream for some time, XR focuses on creating a parallel, albeit different experience, by emulating real life senses in a digital space (Marr, 2019). Thus, Society 5.0 gives limitless uses to the people, from working in cyberphysical spaces from the convenience of one's home, to establishing autonomous decentralised cities. While this model of society was first put forward by Japan at the World Economic Forum's annual meeting in 2019 (Nakanishi, 2019), it has inspired researchers around the globe to actively work towards achieving the goals of Society 5.0. Society 5.0

identifies three elements that drive social innovation: data, information, and knowledge (Deguchi et al., 2020). Data needs to be converted to information to be useful, but even that needs to be converted to knowledge in order to be disseminated. In Society 4.0, this conversion process had been driven by human–computer interactions. In Society 5.0, the process will be driven without human intervention, by using AI-derived knowledge to gain greater opportunities. This phenomenon has already occurred, as the world very recently witnessed the launch of very advanced AI chatbot models like ChatGPT, Google Bard and Jasper Chat. With many more AI chatbots still under development, it is noteworthy that the transformation to Society 5.0 has already begun.

The Fifth Industrial Revolution is a relatively new and emerging phase in the evolution of technology. AI-driven workspaces, which have already begun usage, is a marker into our transition to Industry 5.0. We are merely at the emerging point of Industry 5.0 and are yet to fully master its extensive capabilities, both social and economic. Our structure of society will soon be evolved to where all human needs will be met by AI and Machine/Deep Learning technologies (Aleedy et al., 2022). In fact, we would actually rely on machine learning to rapidly transfer vast bulks of data around the world to not clog up our daily virtual lives with information overload.

There are, of course, ethical considerations of Society 5.0, especially considering a large part of our lives and our data will be trained through an AI model to deliver only the products and services in the amounts and at the time needed (The Government of Japan, 2019). Considering how this data will be collected and stored, can we really ensure our privacy? This is also concerning when the lines between human-generated and machine-generated content are blurring. It is beautiful, yet haunting to see how AI models can write entire research papers, create extraordinary art, compose unique songs and also make videos from scratch. This goes on to show that the world is entering a phase where we won't be able to acknowledge our reality. Since such technologies are within the reach of the public very easily, there will be many challenges to maintaining discipline in a world where every person has the key to spread disinformation everywhere. These ethical considerations should be taken into account by every legislator before setting proper guidelines.

As Heraclitus once iterated, "There is nothing permanent except change", we should embrace humanity's next leap into transforming towards a society that is sustainable, and self-

sufficient. Sure, there will be certain unforeseen consequences of our actions, but only if we learn from our mistakes in the past, it may be possible to implement the ideals of Society 5.0. However, the most important thing to remember, is that Society 5.0 should focus to address real-world problems, such as income inequality, lack of resources, inadequate healthcare and so much more, because humanity can only progress when it allows everyone a safe environment to grow. To do this, world governments need to work together and without any conflicting interests. Since the past three years have seen drastic changes in the structure of the world, it is about time that we question 'how?', not 'when?'.

Author's Biography
Dr. **Khandakar Kamrul Hasan** is the Assistant Professor {Adjunct Faculty} at the Department of Business Administration at Shanto-Mariam University of Technology in Dhaka, Bangladesh. He completed his Doctorate of Philosophy from the Department of Business Management at Tripura University, India, and a Master of Science in Management at Peter the Great St. Petersburg Polytechnic University, Russia. His research interests include Learning Continuity, Online Learning, Blended Learning, Knowledge Management, Design Thinking and Higher Education.

Mr. **Hissan Khandakar** is an "A Level" Candidate under the Cambridge Assessment International Examinations board, to be conducted by the British Council Dhaka. He has published several articles in both national and international newspapers. He is a former voice artist at Bangladesh Betar, the state-owned radio station of Bangladesh, co-hosting a leading children's show - "Ami Meena Bolsi", funded by UNICEF. His areas of interest include Adolescent Well-being, Mental Health, Education 4.0, Metaverse and Design Thinking.

REFERENCES

Aleedy, M., Atwell, E., & Meshoul, S. (2022). Using AI Chatbots in Education: Recent Advances Challenges and Use Case. In *Artificial Intelligence and Sustainable Computing* (pp. 661–675). Springer. https://doi.org/10.1007/978-981-19-1653-3_50

Deguchi, A., Hirai, C., Matsuoka, H., Nakano, T., Oshima, K., Tai, M., & Tani, S. (2020). What Is Society 5.0? In *Society 5.0* (pp. 1–23). Springer Singapore. https://doi.org/10.1007/978-981-15-2989-4_1

H-UTokyo Lab. (2020). Society 5.0. In Hitachi-UTokyo Laboratory(H-UTokyo Lab.) (Ed.), *Springer*. Springer Singapore. https://doi.org/10.1007/978-981-15-2989-4

Marr, B. (2019, August 12). What Is Extended Reality Technology? A Simple Explanation For Anyone. *Forbes*. https://www.forbes.com/sites/bernardmarr/2019/08/12/what-is-extended-reality-technology-a-simple-explanation-for-anyone/?sh=2b6c1cb67249

Nakanishi, H. (2019, January 9). *Modern society has reached its limits. Society 5.0 will liberate us*. World Economic Forum Annual Meeting. https://www.weforum.org/agenda/2019/01/modern-society-has-reached-its-limits-society-5-0-will-liberate-us/

The Government of Japan. (2019). Realizing Society 5.0. In *The Government of Japan*. The Government of Japan. https://www.japan.go.jp/abenomics/_userdata/abenomics/pdf/society_5.0.pdf

---