

INTERNATIONAL CONCLAVE (Hybrid – Virtual and In-person)

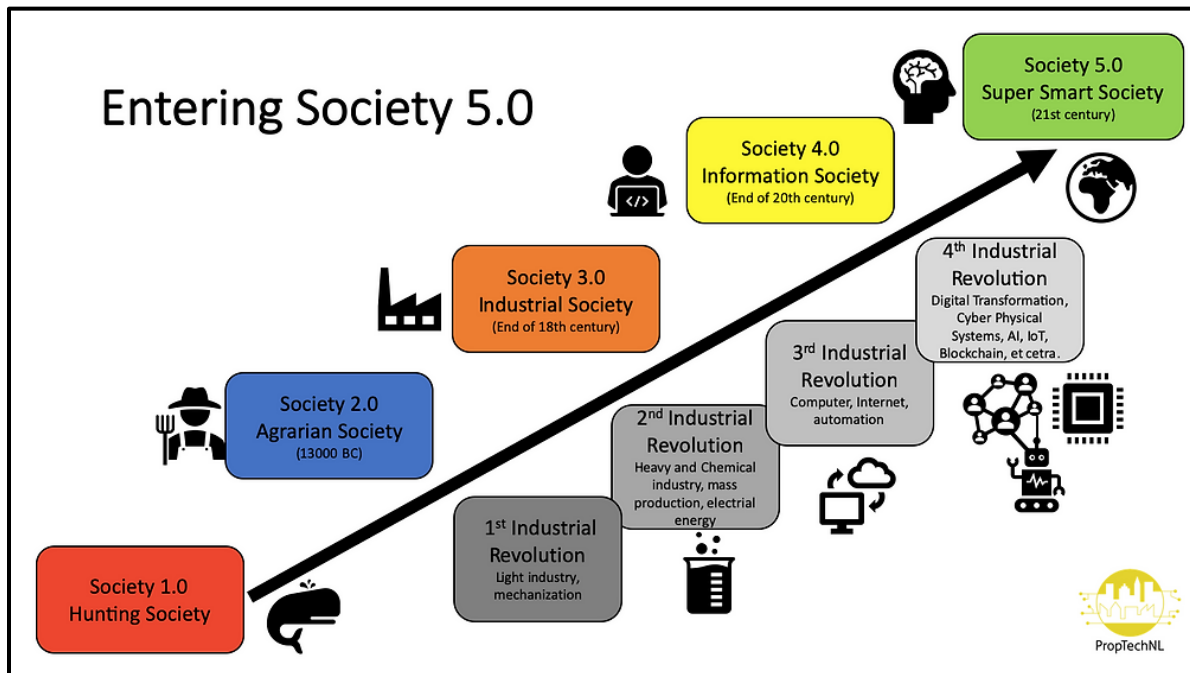
On

The Road from Industry 4.0 to Society 5.0 and Beyond: Evolving Technologies and Transformations

Thursday the 15th and Friday the 16th, December 2022

(RMK Engineering College, Kavaraipettai, near Chennai, India [www.rmkec.ac.in])

Announcement



The last few decades have ushered in technological transformations that have touched every aspect of human life. They are radically changing the way humans live, act, and interact with one another. The scale, scope, and complexity of these transformations are beyond anything that humankind has hitherto experienced. Some of the recent unprecedented changes have been mainly contributed by the Digital Revolution. The Fourth Industrial Revolution (Industry 4.0) evolved mainly as a result of this digital transformation, and is marked by an amalgamation of technologies which leads to a 'Connected World' blurring the lines between the physical, digital, and biological domains. Technologically this has been a marvel. But Technology is intimately connected with, and is accountable, to the social systems. They tend to demand that the evolving technologies should start focusing on social goals. Such technologies define and steer the future towards a sustainable, exciting and inclusive society, leading to a better quality of life for all. Public policies, free market economy, and ethical and moral (right and the wrong) values, have major roles in steering the technologies towards such a society. Such a society has been christened as Society 4.0 and going beyond that into¹ Society 5.0.

Actually, this is not new. As early as the 1980s, in his article on “Future Trends in Interaction of Engineering with Society”, E.Wenk Jr, had predicted, among other things, the following² :

“The general public is likely to feel more vulnerable and impotent. Public interest lobbies will demand to know what is being planned that may affect people’s lives and environment, to have estimates of a wide range of impacts, to weigh alternatives, and to have the opportunity to intervene through legitimate processes. Given the critical choices ahead, greater emphasis will be placed on moral vision and the exercise of ethical standards in delivering technology to produce socially satisfactory results. Accountability will be demanded more zealously”.

We still have ten years to achieve the 17 Sustainable Development Goals³. To achieve these goals, we need a paradigm shift. To meet the challenges of the future with fresh courage, Japan has developed a new vision for a super-smart society, Society 5.0. Japan’s definition is: “A human-centred society that balances economic progress with solving social problems through a system that highly integrates cyberspace and physical space.”⁴

This conclave will focus on the emerging technologies, their increasing contribution to an egalitarian society, and their possible threats to society if misused. It will focus on the recent developments, trends and various applications of, these technologies. It will facilitate presentations on societal implications and the applications of these technologies in the realm of human welfare.

It will provide an international forum for researchers, academicians, professionals, and students from engineering fields across disciplines to interact with each other, and exchange information on the latest developments. The conference will include invited presentations by experts, deliberations and panel discussions in several tracks to come out with a suggested road map for Society 5.0. There will be a technology exposition and live demonstration of the technologies and tools.

The broad areas covered, but not limited to, are:

- Emerging technologies connected with digital transformations, like, cloud/edge computing, artificial intelligence and machine learning, internet of things, big data and real time analytics, mobile applications, metaverse, virtual reality, augmented reality, geo-spatial technology, data security, blockchain technology, API based integration, RISC V design and manufacturing, etc.
- Industry4.0 related developments like connected factories, robotic automation, digital simulation and digital twins, cyber-security technology, Industrial Internet of Things, Additive manufacturing, smart factories, related digital technologies, lean digital thinking and lean digital business excellence models to prepare for Industry 4.0, etc.

- Organizations' inability to build new skills at the pace of technology innovations losing ground to digital era competition, gig economy, leveraging the digital skills of the globally distributed digital specialists to design new solutions, products, services, business models in various industries like mobility, healthcare, digital education, manufacturing, food & agriculture and related areas, developments in marketing management in the digital era, open digital innovation, emerging trends in mobility and healthcare management in pandemic and post-pandemic times, smart cities and villages, responsible supply-chain management, etc.

- All ethical, moral (perceptions on right and wrong) spiritual considerations, Sustainable Development Goals, quality of life, inclusive society, knowledge creation and dissemination, Digital economy, Digital transactions, etc.

The Conclave will be held in a Hybrid Mode comprising Virtual with Physical participation to a limited extent. We would love to have you with us, but would be happy with your virtual presence too in view of the uncertainties as a fallout of the recent pandemic.

Kindly contact us at : i4s5con@rmkec.ac.in

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References:

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4. Society 5.0: Proptech meets Sustainable Development Goals:
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