ROUNDTABLE ON
A.I. and Manufacturing and Services

FRIDAY, 19th JANUARY, 2018 | 2:00 pm – 5:00 pm

THE ENERGY AND RESOURCES INSTITUTE (TERI) BANGALORE

4th Main Road, Domlur II Stage, Domlur
Bengaluru, Karnataka 560071

CONCEPT NOTE

The Centre for Internet and Society (CIS), Bangalore is organizing a roundtable on 'A.I. and Manufacturing and Services' on the 19th of January, 2018 from 2 to 5 pm at 'The Energy and Resources Institute' (TERI) Bangalore. The Roundtable seeks to discuss the various issues and challenges surrounding the implementation of AI and related technologies on manufacturing processes and services.

Since the Industrial Revolution machines have substituted human labour and helped industries save time and money. This was succeeded by the advent of computers and technology which helped in completing tasks with better speed and accuracy than the human brain. The emergence of machine-learning technology and artificial intelligence has now made machines capable of doing work that was earlier considered to be something that could only be done humans.

From the use of AI in understanding customer shopping trends, to its use in making automobiles, AI is becoming more of a norm than an exception. The analytics of how customers shop are now helping companies forecast their manufacturing needs. The synergy of technology and machines i.e. smart manufacturing, not only changes manufacturing and shipping but also improves worker safety. Different forms of smart manufacturing are also starting to come up in India: Wipro and Infosys have launched AI platforms, and the Indian Institute of Science is developing a smart factory with support from Boeing Company and General Electric. Infosys has also released an AI platform, 'Nia', which is programmed to forecast revenue and understand customer behavior.

The instances of use of machines to substitute human workforce, in some cases, has brought about a sense of worry. Recent trends in factory hiring shows that jobs are being lost to automated forms of labour, further evidenced by a report from the research firm HorsesforSources, which predicts that India is set to lose 640,000 low-skilled job positions to automation by the year 2021. The IT sector in India is also under risk from the use of AI. Reports have also found that the rising unemployment in the IT sector has led to increased pressure on labour regulators.

Although there are some studies that state that the use of AI would bring about a market for people who would need to work along with AI, the FICCI and EY's 2016 Report on the Future of jobs and its implication on Indian higher education suggests that one of the ways to combat the loss of jobs was reskilling and upskilling the labour force. India has taken the first step towards this by launching the National Skill Development Mission.

From the use of neural networks to monitor steel plants to packing and shipping groceries, the use of intelligent machines have begun disrupting traditional business models in the industry. However these advancements raise questions around labour, ethics, liability, and machine human cooperation. Dialogue and debate is needed to understand how AI is being used in manufacturing, the potential benefits and challenges of the same, and a way forward that optimizes innovation and protects human rights.

ROUNDTABLE AGENDA

2:00 – 2:30 **Introduction and setting the scene**

2:30 – 3:30 **Discussion on the AI landscape in the manufacturing and services industry:**
- Manner and extent of integration of AI into manufacture and services
- Relevant stakeholders and their roles in implementing AI in industry
- Future of AI and related technologies in manufacture and services
- Impact on work and labour

3:30 – 4:30 **Discussion on challenges and solutions towards regulating AI in India:**
- Challenges faced in the conception and implementation of the AI product/service, and reasons for such challenges.
- Regulatory provisions for implementation of AI in the industry and services under the existing laws, and need for reforms.
- Challenges posed by AI to existing policy and regulatory frameworks in the Indian as well as the global context, and possible solutions.

4:30 – 5:00 **Conclusion and way forward**