Our Eye Firmly on AI

By -Amitabh Kant, Satwik Mishra

India's use of technology to turbocharge socio-economic development is now a globally celebrated phenomenon. Our various interventions in Digital Public Infrastructure (DPI) have promoted choice, competition, innovation, entrepreneurship, and equity. Instead of waiting for wealth to trickle down, we have proactively built an automated plank of opportunity, enabling those at the grassroots to rise.

According to the Bank of International Settlements, in just 9 years, initiatives like Aadhar, Jan Dhan Yojana and UPI propelled financial inclusion, achieving what would have traditionally taken 47 years. DigiLocker's success is evident with 152 million users and over 5.6 billion documents issued by 2300 issuers, streamlining market interactions for efficiency. Sustainability efforts like Fast Tags saved 350 million liters of fuel in 2021, preventing 9.8 million tons of CO2 emissions. ONDC is facilitating fair and transparent e-commerce transactions, now recording 35,000 daily orders, fostering equitable growth in e-commerce.

Now, it is essential to translate this ethos to another fascinating frontier- Artificial Intelligence (AI). According to the World Economic Forum AI could potentially add \$1 trillion to India's economy by 2035. AI can be a catalyst for transformative changes for society. With responsible deployment, AI deliver clean air and water, advance public health, augment equity in education, make governance inclusive and activate the next lever for equitable growth. Its applications are already reverberating across Indian society.

First take the Jugalbandi application. It is a free and open platform that combines the power of Large Language Models (LLMs) and Government of India's language translation model Bhashini to power conversational AI solutions. Language will no longer be a barrier in accessing information. It is empowering citizens to access information about government schemes, healthcare benefits and our justice system in the language of their choice.

AI is promoting affordable, personalized, and precise healthcare plans. Dozee, an AI intervention, supported by the Government of India, is aiding contactless remote patient monitoring and early warning systems. Through this intervention, hospitals are saving almost 2.5 hours of nursing time by automating patient monitoring. ICU level care will no longer be a privilege but a service available for those in need.

Finally, the banking sector has witnessed a revolutionary transformation with the advent of AI, bringing an end to long queues and paperwork. AI integration is streamlining digital KYC verification, enhancing credit score calculations, improving risk assessment, enabling fraud detection, and easing compliance processes. According to a FICCI-PwC survey, AI applications are projected to enable potential cost savings of \$447 billion for banks by 2023.

Even with these profound applications we have just scratched the surface. Google's Alpha Fold brought about a life sciences revolution by accurately predicting and open sourcing all 200 million known protein structures in science. We are now at the precipice of achieving what many envisioned for decades but didn't have the technology to achieve. Utilizing the advances made in Large Language Models, we could soon be designing proteins for our needs. The benefits of just this endeavor are abundant - tailor-made therapeutics for untreated diseases, materials science catapulting to new dimensions bolstering our sustainability goals, agricultural yields skyrocketing to end food crises, and finally a future free from the chokehold of pollutants.

Given this vast potential, democratizing the benefits of AI is essential. Drawing from the principles of our exemplary DPI ecosystem, we can build a thriving, reliable and trustworthy AI ecosystem.

The first step is to endorse openness and transparency. The private sector needs to be more transparent in its design and development cycles of AI. We need a shared understanding of both the immense opportunity and risks which this transformative technology presents. It is not sustainable to keep the levers of AI in the hands of few large corporations. The internet was founded and still runs on open-source code. If AI is to be truly foundational, its developers need to embrace the open-source movement. This will bring it accountability, equity, security and most importantly responsibility to design, develop and deploy trustworthy systems. We have our UPI innovation as a globally appreciated initiative on this front.

Secondly, we must prioritize cooperation and collaboration among stakeholders to mitigate AI risks. We need to build a focused, outcome oriented, and tangible partnership between the private sector and governments. The Indian State and our industry should actively participate in chartering a course for trustworthy and Responsible AI. We have taken substantial cognizance of the profound impact AI can have on society in our G20 negotiations and surely this effort will continue with India's presidency of the Global Partnership on AI.

Thirdly, new frontiers of public policy must emerge, recognizing that traditional regulatory models may not adequately address the transformative nature of this technology. It is imperative to envision global standards for the fairness, reliability, robustness, and safety of AI systems. We need policy interventions which embed safeguards, define guardrails, and simultaneously advance and champion innovation.

Finally, the public and private sectors must ensure proactive support to AI R&D. Now, more than ever, it is crucial to incentivize our brightest minds to shape AI's development and steer its application towards addressing challenges. In the sixth edition of the AI Index Report by Stanford, India emerged as the leader in AI skill penetration rates. As of 2022, a significant percentage of AI projects on GitHub were contributed by Indian software developers (24.2%). We must make a concentrated effort to tap into this talent pool. Facilitating access to reliable data and computing power is crucial to establish India as an AI research hub. As importantly, it is essential to incentivize not only engineers but also experts from diverse disciplines to be driven by this cause. Trustworthy and reliable AI will only be achieved through an approach that is informed by multiple perspectives.

We need to embrace this transformative journey ensuring that AI is a force for good, enhancing our well-being, and shaping a future that holds boundless opportunities. The time to act responsibly and collaboratively is now. The incredible potential of AI can be realized by the power of our collective imagination and unwavering commitment to a better world.

- Amitabh Kant is the G20 Sherpa for India. Satwik Mishra is Vice President at WEF's Centre for Trustworthy Technology. Views expressed are personal.