

Digital gap keeps Covid vaccine away

The yawning gap between India's tech-savvy city dwellers and the illiterate labourers of city slums and rural regions are being felt more alarmingly during the ongoing scramble for Covid vaccines. It is estimated that only around 40% citizens in India have access to smart phones. Despite that, the government has made it mandatory to register in the Cowin internet portal to get vaccinated for Covid-19.

Eventhough many activists, volunteer groups and start-ups have emerged to help under-privileged citizens to register for Covid vaccine, much ground remains to be covered for the nation to come out as a fully vaccinated nation. To complicate matters, there is still an unnerving scarcity of vaccines in many parts of the nation. A Supreme Court bench comprising of Justices DY Chandrachud, S. Ravindrabhat and LN Rao have already expressed their displeasure in the Central Government's tacky rollout of vaccines via the Cowin portal.

Many youngsters are complaining that vaccination slots were mostly open only for the 45 plus age groups even after May 1st, the day vaccinations were made available to the 18-45 age group as well. Due to the huge influx of users, the servers kept crashing in many places,



making registration a painful and time consuming affair.

Cowin registration has become a stumbling block not only for the slum dwellers of India, but also for other vulnerable sections like the visually handicapped or even the senior citizens. Getting used to a new App is not easy for many. For senior citizens whose tech-savvy children

might be living in a distant city or abroad, the registration for 2 doses of vaccine is most likely to pose a challenge. Many rural regions of India lack high-speed internet connectivity too. All these point to the fact that the government's rollout of the vaccine through Cowin portal has only served to expose the huge digital divide prevalent in the nation.



Vaccine production will reach 10 crores

Amidst increasing distress calls from various Indian States & Union Territories for covid vaccines, the Serum Institute of India has promised to boost its production to 10 crore doses from the present 6.5 crores. The vaccines are estimated to reach citizens by mid June. This was intimated to Union Home Minister, Mr. Amit Shah by Prakash Kumar Singh, Director of Serum Institute of India. At present, its employees are working extra shifts to meet the huge demand for Covidshield vaccines.

Robots enter a century!

The word 'robot' has completed 100 years in human imagination. In other words, 2021 marks the hundredth year of the first staging of a play titled *Rossum's Universal Robots* by Karl Capek, at the National Theatre of Prague which depicted a team of robots. In the play, the creator of robots makes them undergo pain to reach technical perfection. This urge them to rebel against their creator. Ever since those times, robots have appeared in fiction and films as good and bad characters. The word robot takes root from the Czech word "robota" which means forced labor. Today, man has developed robots for a wide variety of applications and has successfully reduced human effort in many spheres of life.

A robot is designed as a combination of electronics, mechanics and programming



which senses the surroundings through sensors, processes the sensor information and does a programmed task in response with the help of actuators. The response can be locomotion or manipulation, like turning on a LED light, rotating a wheel, moving an arm, raising an alarm and so on.

rehabilitative robots. While surgical robots assist surgeons in performing operations, rehabilitative robots help patients while they recover from medical conditions like a stroke or a comma. Robots are also being used to sterilize rooms or deliver medications to patients.

Sanitation Robots: The increasing outbreak of deadly viruses like Corona and Ebola has forced many healthcare facilities to use sanitation robots to clean and disinfect surfaces. The main types of disinfection are UV light and hydrogen peroxide vapours.

Military Robots: The most advanced technology robots are built with military

applications in mind. Bomb disposing robots, exploration drones are examples.

Entertainment Robots: Their prime objective is to entertain people and are capable of singing or dancing. They take up the roles of comedians, parents or pets. Entertainment robots might talk with people, serve food & drink at a restaurant or carry kids. Some even act as toys for children.

Space Robots: Robots are widely used in

space research as they can function for extended hours in environments where humans cannot even breathe. Robotic spacecrafts and rover vehicles are also designed by nations for space research.

Underwater Robots: These robots are mainly used for scientific research and military purposes. They can construct, salvage, rescue, repair or research in fully submerged conditions.

Robotics Engineering

This is the stream of engineering that deals with design, structure and application of robotic solutions. It has tremendous scope as a career option as robots will play an important role in the future of man. A robotics engineer takes care of all the aspects of developing a robot such as its design, maintenance, testing, and the ensuring of its proper functioning.

Artificial Intelligence (AI) & Robotics

Artificial Intelligence or AI is the replacement of human intelligence with certain computational tools in the execution of certain tasks. This technology is currently progressing at a phenomenal pace. AI when combined with robotics is a powerful combination. Today, AI has become increasingly relevant in robotic solutions, introducing flexibility and learning capabilities in previously rigid and limited applications. In factories, at sections like Assembly, Packaging and Customer Service, robots powered by AI are deployed. Nowadays, we also see Chatbots answering customer service questions and Medical

Assistant Robots diagnosing diseases based on patients symptoms, which are also the benefits of AI.

The introduction of AI enables an organization to cut down on labour resources, save time and in many ways improve overall efficiency. Sooner or later Robotics & Automation will find its application in every facet of human life. The advancement in technology would bring a day in which robots will be omnipresent. They will soon sneak everywhere from gadgets to apparels and right into our own bodies.

What the technocrats tell!

Stephen Hawkins, Elon Musk, and Bill Gates are forewarning the world about the potential dangers of Artificial Intelligence (AI) growing beyond human control. Many experts believe that it will bring about sweeping changes in the nature of work across the world. They worry that if socio-political and economic ecosystems remain the same, while technological acceleration, integration, and globalization continue undeterred, half the world could be unemployed by 2050.

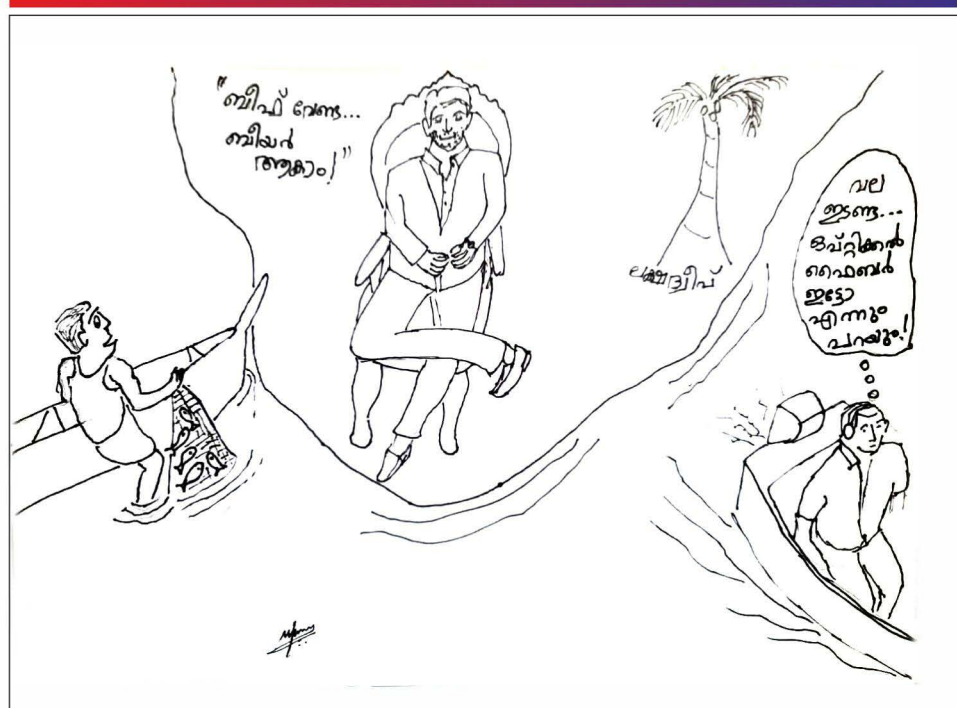
Robotic types

Industrial Robots: They are typically articulated arms seen in industrial settings, undertaking tasks like material handling, painting, welding and the like.

Household / Domestic Robots: These are robots specially designed to undertake domestic chores and are equipped with various gears like robotic pool cleaners, robotic sweepers, robotic vacuum cleaners, robotic sewer cleaners and so on.

Medical Robots: They serve in the medical & healthcare scenario and can be broadly classified as surgical robots and

Digital buddy



Whatsapp files lawsuit

The popular messaging App, Whatsapp has filed a lawsuit challenging the India Government's directive to closely monitor and trace content in a bid to curb fake news, revenge porn and other spiteful content. Whatsapp contends that tracking the originator of a message has no legal

sanction and goes against India's fundamental right to privacy. To top it all, keeping tabs on messages sent by its 500 million users in India demands the saving of billions of messages and breaking the promise of end-to-end encryption of messages which it offers to its subscribers.

Ultra fast charging by Xiaomi

The Chinese smartphone brand, Xiaomi has introduced a 200W adapter which is capable of charging its Mi 11 Pro smartphone to 50% in just 3 minutes and 100% by around 8 minutes. Mi 11 Pro, one among the prestigious smart phones of Xiaomi has a 4000 mAh battery. The rapid charging was displayed in the company's social media platform as proof of its latest technology advances.

Eventhough, the fast charging technology is not commercially available now, Xiaomi has made claims to implement it in its product line at the earliest.

5G: Environmental concerns raised

A study by Greenpeace, the global environmental agency indicates that planet-warming carbon dioxide will be generated at dangerous levels by 5G base stations and data centers especially in countries like China which is home to the world's largest 5G networks and the biggest data centers. The study says that these technology verticals consume huge amounts of electric power for their functioning, which make them contribute considerably to global warming. Interestingly, China is aiming to achieve carbon neutrality or zero emissions by 2060.