

Japan's vision to be robotics super-power: India's role and benefit

The world's first Robot hotel staffed entirely by robots is set to open in Japan by end of 2015. Japan's Mega bank is preparing to unveil robot employees with a human touch. In a Robot Restaurant in Tokyo, one can see a unique 60-minute show where robots perform a dance show and can even serve food. A big department store has commissioned service robots to help their customers in shopping. All these service robots are servicing humans. President Barack Obama during his trip to Japan year played soccer with Humanoid Robot ASIMO, German Chancellor Angela Merkel makes friends with a disco-dancing, and football-playing android robot during her visit to Japan.

Japan employs over a quarter of a million industrial robot workers, and the government hopes to have 1 million of these Japanese robots installed throughout the country by 2025. Declining birth rate, aging society and shrinking population all are leading to labor force problem, to tackle this the country is hoping for robot revolution to fill this need since a single robot can replace about 10 to 100 human workers. More importantly Japan has engaged robots successfully during disasters. Life-saving robots, Rescue robots are engaged towards relief efforts in the aftermath of earthquakes and other disasters by navigating through wreckage that is too dangerous for people to enter and by gathering information on missing persons and the surrounding conditions. Recent years have seen rapid advances in the development of these robots, and Japan is now a global leader in the field.

Already an industrial robot powerhouse, Japan has successfully developed industrial robots known for its obsession towards robot, Japanese inventors and researchers have been following a trend that annually they come out with new introduction of Robots. Japan's Craze towards robots for more than 2 centuries is setting an industrial revolution, to full fill World's demands on Industrial, Service and Medical fields. Japanese picture-based books, Pop culture, colorful animation and Shinto religion hold Key factors in developing this Passion. Owing to this Japan's extreme passion and skill in robotics, Japanese companies have rolled off their research facilities over the years. According to the Robotics Society of Japan, domestic manufacturers used to produce about 90 percent of all robots worldwide until around the year 2000.

Toward the realization of a New Industrial Revolution Driven by Robots, Japan Revitalization Strategy is set by the Japan's Ministry of Economy and Trade [METI] by launching the Robot Revolution Realization Council. The METI has published a report stated that Japan should achieve this Robot Revolution by having three pillars, [1] To make Japan as robot innovation hub in the world, [2]Utilization and dissemination of robots across Japan, aiming to achieve a society with the highest level of robot utilization in the world and to realize the daily life that robots exist all over Japan; and [3]Development of the Robot Revolution, standardize Japan's robot technologies, and to disseminate Japan's Robot approach to broader fields globally. Japanese analysts see that its citizen's passion towards Robots could spark a revolution for new industrial revolution Worldwide. Mechatronics and Robots are the favorite study subject in colleges and every school student would want to give a try in making some robot object.

With the robots technology showcase plan for world, The 21st Annual International Robot Exhibition (iREX), a grand robot exhibition is to be held as a joint venture of Japan Robot Association and the Nikkan Kogyo Shimbun in December 2015. This exhibition includes about 400 domestic robot manufacturers and related businesses and over 50 international exhibitors. Approximately, 1 million domestic participants from different fields like electronics, automotive etc. along with foreign participants certainly makes iREX 2015 an international event. The leading exhibits include industrial robots working in manufacturing industry with real manufacturing environments, robotic demonstrations, and overwhelming visitors to touch and experience the latest developments in robotic technology.

Every year general robots, bi-arm robots with their two human-like hands robots engages visitors by displaying their ability to assemble and remove things etc. Currently, various robots used in different fields of food, cosmetics, pharmaceuticals etc. are on display as well as humanoids are expected to be showcased in live action this time. Moreover, robots used for human welfare in the fields of agriculture, medical, communication, rescue robots and so on will also be on display.

iREX 2015, includes robots developed from school children from all over japan as a part of extracurricular projects and learning experiences. Government-led, robot revolution achievement Conference announced a proposal to hold a robot Olympics (tentative name) in conjunction with the Tokyo Olympic Games of 2020. This exhibition also promotes various contests and competitions planned to be held in iREX 2020. Perhaps, in near future, Japan taking pride in being as Robots

superpower is not far from organizing Robots Events that could surpass all world`s events which are organized by human. Japan Robots Exhibitions [iREX] happens to be one of the largest event in Japan in this domain.

While there are many industrial robots are being sold in India manufactured by Japanese companies, the real need is to develop intelligent programs, Server engineering, electrical, and embedded programming ,mechanical engineering specifications, Designs, process and other aspects to embed in robots. Few Japanese companies including the iREX event has announced invitations for Indian companies, Youngsters to exhibit their services, technologies that could possibly find its way to collaborate with Japan Robotics. This is huge opportunity for Indian programmers, companies with this specialization to connect and collaborate with Japanese Robot manufacturers.

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