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Ireland-headquartered medtech company Medtronic, which completes 75 years of its inception this year, recently inaugurated its newly expanded state-of-the-art Medtronic Engineering and Innovation Center (MEIC) in Hyderabad, in the presence of D Sridhar Babu, Minister of IT, Industries & Commerce, Government of Telangana, along with Geoff Martha, Chairman and Chief Executive Officer, Medtronic, and Jennifer Larson, US Consul General. This expansion is part of the investment of approximately Rs 3000 crore announced by Medtronic over five years to scale up and expand the R&D facility and to employ 1500 people in future. BioSpectrum spoke to Divya Prakash Joshi, Vice President & MEIC Site Leader, Medtronic to learn more about the companyâ??s growth plans and offerings in India in 2024.



What prompted Medtronic to invest such a significant amount in expanding the Medtronic Engineering & Innovation Center (MEIC) in Hyderabad? What are the key highlights of the expanded site?

Medtronic's decision to strategically invest in the Medtronic Engineering & Innovation Center (MEIC) in Hyderabad is driven by several key factors. Firstly, India's healthcare technology sector offers immense growth potential, and Medtronic recognises the country's importance as a global hub for innovation and talent. Hyderabad, in particular, has emerged as a thriving ecosystem for healthcare technology research and development, with a pool of skilled professionals and strong government support. By expanding MEIC in Hyderabad, Medtronic aims to leverage these opportunities and foster collaboration with the local ecosystem and stakeholders to drive innovation and advance patient care. The investment reflects Medtronic's commitment to investing in India's healthcare ecosystem and delivering innovative solutions that address the evolving needs of patients and healthcare providers. MEIC is Medtronic's largest R&D centre outside the US. At 250,000 sq. ft. of total space, MEIC will focus on collaborative innovation, training and education, and immersive experiences from the expanded space, aimed towards shaping the future of healthcare technology.

The new space will house a Digital Therapy & Innovation Lab, Connected Care Lab, Platform & Tech Lab, Systems Engineering Lab, and Software Lab, as well as new workstations and wellness amenities for employees. MEIC is building capabilities in product security and we have teams engaged in penetration testing, and Threat Modelling to ensure cyber security in our products.

What are the major hiring plans in India in the coming times, and under what skill or expertise, especially with new emerging technologies? Are you looking at partnering with academic institutes for more hiring?

Healthcare technology has primarily focused on engineering skills like electrical engineering or mechanical engineering, but we are expanding to areas like digital and other aspects of software as the newer trends evolve. With 900+ engineers, MEIC is home to some of the best STEM talent bringing in diverse perspectives, and ambition to engineer the extraordinary.

With this expansion, MEIC aims to leverage the sizeable pool of diverse and skilled talent in India involving engineering, mobile apps, application and desktop software, cloud/web apps, data engineering, embedded software, product security, and cyber-product security. The investment will support key healthcare technology areas like robotics, imaging and navigation, surgical technologies, and implantable technologies. It will create significant job opportunities across various niche skill sets like software, data engineering, product security, robotics, kinematics, etc.

The team would continue to collaborate with global R&D units in surgical technologies, imaging and navigation, and implantables in Cardiovascular and Neuroscience with a focus on connected care, and mobile applications, among others.

We have relationships with various academic institutes across Telangana and other states in India for talent hiring. We also have partnerships with the startup ecosystem to foster digital upskilling of the workforce. The company invests in getting talent from premier institutes and we facilitate the upskilling of these engineers in medtech and therapy domain knowledge.

Apart from strategic partnerships with leaders in academia, MEIC has infrastructure in place to ensure digital training of the workforce. With a clear onboarding plan, MEIC not only hires talent from the health-tech sector but also from other industrial sectors and freshly-hired graduates have a facilitated mentoring plan. MEIC is building a digital innovation lab at the new site to enable the workforce to understand methodologies like device building, surgeries, etc.

With emerging technologies gaining momentum, how does MEIC envision incorporating these advancements into its operations and offerings in India? Are there any new product launches lined up for 2024?

Our collaborative approach with a focus on research excellence, and close alignment with Medtronic's global strategy ensures the delivery of innovative solutions that address critical healthcare challenges, improve patient outcomes, and drive Medtronic's growth in the global market.

We recognise the growing importance of emerging technologies such as robotic surgeries in advancing patient care. Our team of 100+ engineers played an important role in the launch of the Medtronic Hugo RAS system, a robotic-assisted surgery platform. The centre contributed to a wide range of areas, including software, hardware, systems engineering and quality.

MEIC envisions incorporating these advancements by actively investing in research and development activities, collaborations with healthcare professionals in partnership with the commercial Medtronic India team, and partnerships with academic institutions and technology providers. Our goal for the upcoming years, in line with MEIC’s expansion plans, includes contributing to the areas of ENT, next-gen robotics, acute care monitoring, etc.

What role does MEIC play in Medtronic's overall strategy for product development and global market expansion?

R&D is part of Medtronic’s overall global strategy. Medtronic invested $2.7 billion in R&D globally in FY22. As Medtronic's largest innovation centre outside of the United States, in R&D and Quality & Regulatory, MEIC serves as a critical hub for innovation and collaboration working with many business units, across technologies and across multiple global R&D units.

The teams at MEIC are working on R&D mainly related to software and engineering to drive product development initiatives, leverage cutting-edge technologies, and enhance existing product portfolios. As announced earlier, an investment of approximately Rs 3000 crore will be spent over the next five years on physical infrastructure as well as human and scientific capital.

The centre’s expertise and capabilities contribute to the development of new healthcare technologies that meet the evolving needs of patients and healthcare providers worldwide. MEIC's collaborative approach, focus on research excellence, and close alignment with Medtronic's global strategy ensures the delivery of innovative solutions that address critical healthcare challenges, improve patient outcomes, and drive Medtronic's growth in the global market.

Telangana government has expressed plans to scale up the medical devices park in the state. What are your thoughts on being a part of this initiative?

MEIC started with 50,000 square feet in 2011 during its inception, and it is now at around 250,000 square feet. We have strong collaborations with the Government of Telangana and support their vision to build a robust medtech ecosystem. For now, we are only going to operate from the current site.

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