BioSpectrum
the business of Bi
24 years of leveraging the business of Bio
www.biospectrumindia.co

"Focusing on collaborations with local healthcare providers and academia to develop solutions tailored to India's needs"

30 September 2024 | Views | By Dr Manbeena Chawla

Kalavathi GV has recently stepped in as the Head of Development Centre (DC) and Executive Director at Siemens Healthineers India. In her new role, she is leading over 3,500 DC employees in India and Slovakia, driving the development of precision healthcare solutions using artificial intelligence, automation, and digital transformation for all business lines of Siemens Healthineers. She is a strong advocate of the representation of senior female leaders in the Indian IT ecosystem. In conversation with BioSpectrum India, Kalavathi shares her vision of strengthening the medtech ecosystem in the country, based on her global experiences.



With three decades of industry experience in the medtech and healthcare sector, what new strategies are you bringing to the table to enhance the company's growth this year & beyond?

At Siemens Healthineers, we focus on a horizontal strategy to accelerate vertical business growth, driven by our global development centres in India and Slovakia. One key priority is enhancing customer service by aligning our teams with the global vision to ensure seamless service delivery. We are focusing on integrating our expertise in Artificial Intelligence (AI) and digital transformation to enhance manufacturing capabilities. For instance, in India, we have announced the manufacturing of the Multix Impact E digital radiography X-ray machine to further our commitment to providing better access to care in the country. Strengthening resilience in the supply chain and moving from SKD (Semi-Knocked Down) to fully localised manufacturing are critical goals.

Lastly, we are focusing on leadership development, with an emphasis on diversity and inclusion. It is important to note here that diversity is associated with that in thoughts and ideas too, which can only be achieved by bringing in representative demographics and experience.

What major plans are in store for the Indian market in 2025? How is Siemens strengthening local production of medical technologies in India, cost-effectively?

In 2022, Siemens Healthineers committed to invest Rs 1,300 crore to establish an innovation hub in Bengaluru. We are well on our path to adding 2,000 skilled experts to expand our digital capabilities here. This investment is the largest we have ever made in India and will play a key role in taking our business to the next level by driving digitalisation and expanding our portfolio for emerging markets. The Bengaluru campus will be one of the four innovation hubs for Siemens Healthineers globally and will include centres of competence in digital technologies such as data analytics, artificial intelligence, immersive technologies like augmented and virtual reality (VR), user experience, and cybersecurity.

For us, our collaboration with local and global entities, R&D partners, HCPs, educational institutions, startups, peers, and industry fora is paramount to achieving our purpose. Some of our recent collaborations include-

- A Master Research Collaboration (MRA) with the Manipal Academy of Higher Education (MAHE), to strengthen industry-academia engagement
- An MoU with SAMEER, India's premier R&D Institute of the Ministry of Electronics and IT (MeitY) to create a deep tech healthcare R&D and supply chain ecosystem in India
- A partnership with Qure.ai and the Global Fund to accelerate the use of AI to diagnose tuberculosis, and to boost the adoption of AI & ML programmes that can read chest X-rays and spot the signs of TB-related lung abnormalities.
- This year, we also established the Siemens Healthineers-Computational Data Sciences (CDS) Collaborative Laboratory for AI in Precision Medicine along with the Indian Institute of Science (IISc) to provide biomedical equipment at the upcoming multi-specialty hospital at IISc.

What are your views on the current challenges facing the medtech sector in India, concerning import dependency? What are your expectations from the government to strengthen domestic production and development of medical devices in India?

While the regulatory landscape is evolving, long approval processes and strict compliance requirements still act as barriers to local production. Additionally, there is a shortage of skilled professionals and technology transfer challenges that hinder our ability to compete globally.

To overcome these obstacles, the first step is to take stock of our systems knowledge and assess what can be produced locally. By understanding the entire system architecture i.e. pricing, suppliers, and the local ecosystem, we can strategically collaborate with partners to start mapping which components can be sourced or produced in India. This approach allows us to achieve short-term wins that build momentum towards reducing import dependency.

In terms of policy actions, streamlining regulatory hurdles is crucial. Simplified regulations, faster approvals, and the creation of domestic testing facilities can reduce the time and cost spent on overseas certifications. Specific government initiatives aimed at promoting local innovation and setting ambitious export goals would also be beneficial.

We are working to localise production through partnerships like our collaboration with SAMEER to develop indigenous technologies. A balanced approach to local manufacturing is key, while design can take place globally, it is more practical to align manufacturing closer to where the products will be used. This also ties into lifecycle management, repair, and ensuring high standards of quality throughout the process.

Simplifying operations is another focus. For example, overly complex systems can increase the burden on an already limited skilled workforce. Our goal is to design intuitive systems, such as "one-button" MRI operations, to reduce training needs and improve efficiency. By focusing on these areas and supporting them with a clear return on investment (ROI) analysis, we can foster a more self-reliant medtech sector in India, eventually reducing the country’s dependence on imports.

There are a lot of challenges related to integrating AI in medical technologies. How can those challenges be addressed, particularly for the Indian market? What steps are being taken by Siemens Healthineers to ease out this integration?

AI in healthcare relies heavily on high-quality data and robust privacy measures. At Siemens Healthineers, we gather global datasets, including clinical images, genomic data, and patient histories, while ensuring strict data privacy through anonymisation. Our AI models are built on this data, providing reliable insights for healthcare professionals.

For the Indian market, integration challenges include data diversity, infrastructure gaps, and the need for skilled professionals. To address these, we are focusing on collaborations with local healthcare providers and academia to develop solutions tailored to India's needs. We are also investing in making AI-based tools more accessible by simplifying their operation, ensuring that healthcare professionals can easily adopt and benefit from AI in improving diagnostics and patient outcomes.

There is a lack of skilled workforce in the country, in the healthcare and medtech sectors. How is Siemens Healthineers working in this regard? What more needs to be done?

Siemens Healthineers India currently makes up over 54 per cent of the global software/digital technology teams, making it the largest Siemens Healthineers Technology Center outside of Germany. The team has expertise in digital transformation (AI, cloud, immersive experience, and cybersecurity) and systems engineering (advanced therapies, diagnostics, and molecular imaging). These teams co-create healthcare breakthroughs with our local partners such as clinical, government, academia, and startups.

We acknowledge that the number of people who seek healthcare services and those equipped to deliver them is disproportionate. To improve the skilled workforce, a multifaceted approach is essential. First, it is important to increase the focus on STEM education and foster industry-academia collaborations. Collaboration between the public and private sectors is also critical, particularly in Tier 2 and Tier 3 cities where upskilling programmes can train the next generation of talent. Integrating digital technologies such as VR and AI into training programmes can further accelerate skill development by providing healthcare professionals with hands-on experience in a controlled environment.

Your thoughts on how the women leadership scenario is evolving in the Indian life sciences sector?

The Indian life sciences sector is undergoing a significant transformation with an increased representation of women in the workforce. This shift is evident in the healthcare and pharmaceutical industries, where women are not only entering the workforce in greater numbers but are also ascending to top leadership positions. With over 1,000 women, our teams at Siemens Healthineers are more diverse, and this has resulted in solving complex problems three times faster.

I am excited for the future of women leadership in the Indian life sciences sector, particularly due to the increased awareness of the benefits of gender diversity, not only in terms of social equity but also for enhancing organizational performance. Moreover, the presence of successful women leaders serves as a powerful motivator for younger women entering the field, and initiatives that promote mentorship and networking opportunities are crucial for fostering the next generation of female leaders.

Dr Manbeena Chawla

manbeena.chawla@mmactiv.com