

Globally, MedTech is a focus sector for start-ups – a study of technology incubators showed that over 25 per cent of incubated start-ups were in MedTech, the second largest sector after IT. In India too, startup activity in the MedTech sector is growing by leaps and bounds, albeit from a low base. Today, there are several startups solving Indian healthcare challenges by creating novel technologies, and generating global intellectual property in the process. Startups are tackling challenges such as hypothermia management in premature babies, lung infection in ventilated patients, life support for babies outside the NICU, more accurate labor monitoring, vertigo diagnosis, post-cardiac event monitoring, and screening for blindness, cancers and other conditions. These startups leverage cutting-edge technologies such as machine learning and artificial intelligence, along with electronics, mechanical engineering, and product design expertise, to create innovative, patented, products that not only serve Indian needs, but address global market opportunities.

Financing challenges facing MedTech innovators

Globally, MedTech startups have access to both grant and equity (VC) funding at all stages of product development. Thankfully for Indian start-ups, grant funding for innovative MedTech projects has increased exponentially over the last few years. BIRAC, the funding arm of the Department of Biotechnology, has been instrumental in this happy development. Under the visionary leadership of Dr Renu Swarup, BIRAC has funded more than 100 MedTech projects, and been instrumental in the design and development of many innovative technologies addressing critical Indian challenges. Additionally, there are other international foundations such as Millennium Alliance, Gates Foundation, Lemelson Foundation, and USAID that provide grants to the Indian MedTech sector.

Venture capital investment in MedTech startups has also been increasing over the years- however; it is still negligible compared to digital and consumer sectors. This is largely due to the relatively long timelines in MedTech - 3-5 years for product development, and another 3-4 years for commercial success. However, given the breadth of opportunities in this sector, and the relatively low number of startups, this sector is getting increasing interest from savvy VCs and family offices.

The MedTech market- The Public Procurement Challenge

Most innovative MedTech products in India today have been designed and developed for low-resource, low-skill, public health facilities, and can transform healthcare for low-income consumers who depend on public healthcare. However, over 90% of MedTech procurement in government happens through the tender system- where multiple companies bid to supply a (commodity) product, typically competing on price. This method does not work for an innovative product, which is manufactured and supplied by just one company, the innovator. This systemic issue leads to unacceptable delays, and sometimes outright rejection, in deploying life-saving, affordable, innovative, technologies that are made FOR India.

A defined public procurement system, specifically for indigenous innovative products, perhaps certified by the central government, would go a long way in getting these innovations into the public healthcare system, where they can save innumerable lives. Deployment of such innovations can also be supported through the creation of an Innovation Fund, which funds procurement and deployment of relevant innovations in a pilot district- to generate real-world data on effectiveness and outcomes, and drive nationwide adoption of the best innovations.

Partnership with established MedTech companies

After a startup develops an innovative product, it faces further challenges in manufacturing, commercialization, distribution, and service. In the West, a startup typically partners with a large MedTech company, which takes on these activities. This partnering ecosystem is still nascent in India, with the result that most startups focus on these activities themselves, and not on their core competency of innovation and product development. As the ecosystem matures, it is hoped that India too sees such partnerships between startups and established companies, which get these lifesaving innovations to the market faster, and allow the innovators to focus on what they do best- innovate.

Summary

The Indian MedTech sector is coming of age- as evidenced by the strong growth in innovative startups that are creating novel technologies to solve Indian, and global, challenges. It is important to nurture and support such indigenous innovation in these early days - as they can make India the MedTech innovation hub for global emerging markets.

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