

Innovation in Patient-Centered Medical Devices: Israel's Leadership

Companies need supportive eco-system to face challenges in new product development on a continuous basis

Medical devices market has been estimated at \$322 billion and Israel recorded more patents in medical innovation with 656 companies. Medical device industry is very young and Israel ecosystem is more conducive for innovation in medical device technology due to the following reasons.

Challenges in new product development are to create a new product to fill a need or want in its immediate marketing area. The fate of the new product in the market is unpredictable. As the company grows, it expands the marketing area until the product is marketed nationally. It is also possible that wrong marketing strategies adopted by companies to promote their new product can lead to a product's failure. The process of new product development itself is very risky; it can have serious repercussions on the company's image and performance. The product can have social challenges, technical challenges, legal challenge, distributional and promotional challenges.

- **Low -Budgeted Industry:** Medical devices sector can be operated with little budget. For example, Argo Medical Technologies developed ReWalk, an exoskeleton suit, helps patients with lower limb disabilities to walk. The investment was 1/3 that of the competition. Clusters of medical devices companies share resources i.e. infrastructure to minimize the cost.
- **Low-Manpower Industry:** Israel companies are leaner compared to the US companies. 56% companies have only 1-5 employees and only 3% companies have 100 plus employees. For example, NanoPass Technologies, which develops micro needle-based systems for intradermal delivery of drugs and cosmetics, has only 1 employee.
- **Entrepreneurs are not interested in Quick Buck:** Entrepreneurs of medical devices are not hungry for quick bucks and reap benefits in the long-run
- **Scaling-up is Country-specific:** IT products like Intel chip or Software for Google can be marketed globally. Medical products are not suitable for every market and scaling-up depends on the country.
- **Patient-centered devices:** Emerging technologies are patient-centered and Israel is ahead of others
- **Product development to Commercialization:** Israel companies have ventured into commercialization to reach buyers fast
- **Medical devices break-even quickly:** Medical devices reach the market just in 2-3 years hence break-even is faster
- **Former USSR Immigrants have experience in scientific field:** Some of the immigrants from former USSR have working experience in scientific labs

- **Strong Academia and Defense research:** Israel 's strong academic and defense research provide technological support
- **Government support for R&D:** Israel government is ready to support in all R&D areas

Topic	Course
Challenges in New Product Development : New product development: Unit 13.3	Marketing Management

Source: *Growth Strategies of Israel's Burgeoning Medical Device Sector, K@W, April 18, 2014*