Global Crisis/Innovation Blog

How Strong Minds Raced So Weak Legs Could Walk

By Shlomo Maital



ReWalk

A U.S. National Football League charity campaign once used the slogan, "strong legs run so weak ones can walk". I recalled this during a visit yesterday to an Israeli startup named Argo, launched by Dr. Amit Goffer. Argo's product is called ReWalk, and it is an exo-skeleton (outside-the-body skeleton) which, with electronics, enables those who cannot walk to stand on their own two feet and walk at 2 km. per hour, a good clip. ReWalk can also enable people to climb stairs. You might call it, "strong minds race so that weak legs may walk".

Dr. Goffer told us that following a terrible accident, which left him paralyzed and confined to a wheel chair, he asked an audacious question: How can I create a device that enables people who cannot walk, to walk by themselves? Dr. Goffer has three degrees in electrical engineering, and worked for years at Odin Medical Technologies, which he started (real-time MRI images for brain surgery) and at Elscint (medical imaging). In 1998/9 he conceived of ReWalk and built a prototype himself. He described his approach to entrepreneurship: "not succeeding is not in my vocabulary. You create a corridor...you see a light at the end of it, and there are no exits, once you start you have to go all the way to the end, until you succeed."

Goffer estimates there are 2 million persons in the U.S. alone who are in wheel chairs, and of them, some 500,000 could use ReWalk. He is marketing the device to U.S. Rehabilitation Hospitals, including the Veterans' Administration. There are two models: one for institutions, like hospitals, and the other, for purchase by individuals. Argo has venture funding and employs 15 people in Israel, one in Europe and four in the U.S. It has several patents.

We saw a demonstration of ReWalk. Attached to a disabled person's legs, it uses an electronic sensor device on the person's wrist to move each leg forward, when the person (on crutches) leans forward. The battery power is carried in a small backpack. The device makes a whirring noice, that is not unpleasant or loud. The price is currently \$90,000 per device, in the U.S., and 90,000 euros in Europe. This price will decline as large-scale manufacturing occurs. It finds use both as a 'walker' and as a rehabilitation device to help those who have been injured. By putting those confined to wheelchairs on their feet, erect, it essentially moves them from 'disabled' to 'enabled'. Goffer himself cannot use his device, as he is quadriplegic. But he nonetheless wants to get his device to market quickly. I told him I thought a great many people are waiting for it. "I know," he said. This is why he and his team are working very hard. Production currently takes place at the company's offices in Yokneam, a northern suburb of Haifa.

Check out www.argomedtec.com; this device is quite amazing.