Ideas With Legs

Amit Goffer, a paraplegic, helps disabled people be more mobile, writes Jennifer L. Schenker

August 25th was a momentous day in the life of Israeli serial entrepreneur Amit Goffer. For the first time in 18 years he was able to go outside while standing up.

“At first it was an odd feeling, standing and moving without anything supporting me in the front and after a while I got very excited,” says Goffer. “I was also very happy seeing that it was such a success and that this would be a lesson to others that something that most people take for granted is a dream for others. I am happy seeing that this is the first time in 18 years he was able to walk.”

Goffer was rendered a quadriplegic following an accident in 1997. His legs are paralyzed, he has no control over his torso, he can’t use his fingers and he has limited use of his arms. He has to do everything by using one muscle in each arm. By flexing that muscle Goffer is able to use a thumb-like device on one of his fingers to type on a keyboard or push control buttons. But he hasn’t let that get in his way. Since the accident, Goffer, an ex-air-force captain who has a PhD in electrical and computer engineering, has founded two start-ups. The first ReWalk Robotics, a maker of a wearable exoskeleton, went public on NASDAQ last year. The ReWalk is billed as the first commercially-viable upright device that enables wheelchair users to walk and climb stairs. It won FDA approval in the U.S. and is considered a major breakthrough.

“The ability to stand has major health benefits, helping to improve circulation and bone density and prevent urinary infections and pressure sores. It also improves overall quality of life. Making eye contact with others is something that most people take for granted but wheelchair-bound people miss.”

“When you are confined to a wheelchair it doesn’t just limit your mobility and impact your health, it is very frustrating,” says Goffer. “When you go up to a counter you find you are too short. When you are in a restaurant the waitress will ask your wife what you want to eat if you are mentally retarded. The list goes on and on.”

A smiling Goffer tried out a lab model (pictured here) of the UPnRIDE just outside his home in August. The lab model is being used for testing and learning, as part of the development of the beta prototype, which will be unveiled in October. “What we are proving is that the concept of the UPnRIDE works and that a person with severe disability can be mobile safely, in a standing position, even outdoors,” says UPnRIDE CEO Oren Tamari.

UPnRIDE is a convertible wheelchair that folds up on to the back and makes it easy to either sit or stand. It is being designed to look more like a Segway, “so that people will not notice that the user is disabled,” says Goffer. Much like a Segway, when placed in a standing position, the UPnRIDE moves over all different kinds of terrains at the user’s guidance. Goffer says it has several advantages over other standing wheelchairs, which are primarily designed to work indoors: the UPnRIDE maintains the same center of gravity sitting and standing, making it harder to fall when standing up; the user sits on a stabilized platform that automatically adjusts the angle of the seat as he transitions from sitting to standing; and in an emergency UPnRIDE’s technology is able to identify when someone is likely to fall and activate safety means similar to airbags in a car.

The market could be substantial, given that the number of global wheelchair and mobility scooter users in developed countries is 8.2 million and growing annually by 5%, according to UPnRIDE’s research. About 60% of those people can use smart wheelchairs, translating to a potential annual market of several billion dollars, depending on the UPnRIDE’s target end-user price when it goes on sale in 2017.

The company has so far netted a $50,000 grant from Israel’s chief scientist’s office, a $1.5 million investment from OurCrowd, an Israeli crowdfunding site, and $500,000 from angel investors. It expects to have the UPnRIDE on the market within two years. With UPnRIDE taking up so much of his time those days Goffer has decided to retire from his position as President and Chief Technology Officer at ReWalk Robotics, the company he founded in 2005. He served as the company’s CEO from 2005 until 2012.

Tamari, who has worked at both ReWalk and UPnRIDE, says Goffer has never been daunted by the not inconsequential challenges of designing cutting-edge devices for handicapped people. “He doesn’t see everyday difficulties, he ignores them,” he says. The two met in May 2007 when Goffer was just starting out to build the ReWalk and was working out of an incubator in his alma mater, the Technion University in Tel Aviv. In addition to initial aid from the Israeli Chief Scientist’s office and the Technion, and fund raising on OurCrowd, Goffer says efforts to develop ReWalk were greatly helped by Dr. Alberto Esquenazi, chair of the Department of Physical Medicine and Rehabilitation at Philadelphia’s MossRehab. Esquenazi specializes in amputee rehabilitation, mobility evaluation and treatment, and gait analysis. Esquenazi was introduced to Goffer 10 years ago through a mutual friend while visiting Israel. When Goffer presented his dream about helping paralyzed people walk again, “I told him that this is a very difficult project, one that many people have tried to do and failed.”

The ReWalk gains approval on OurCrowd, which was later sold to Medtronics.

The story doesn’t just limit or impact your health and overall quality of life. Making eye contact with others is something that most people take for granted but wheelchair-bound people miss. Join us as the next generation of entrepreneurs and have an impact on the world. Together we can make a difference. Join us today!

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**Goffer’s Long Walk To Success**

**1975** Graduates with a degree in electrical engineering from Technion — Israel Institute of Technology, begins military service.

**1990** Obtains PhD in electrical and computer engineering from Drexel University in Philadelphia.

**1995** Starts Edin Medical Technologies, which was later sold to Medtronics.

**2001** Starts Appo Medical Technologies (now named ReWalk Robotics), maker of a wearable exoskeleton.

**2005** Starts ReWalk Robotics, which is granted FDA approval to sell the device to the U.S. public.

**2010** October 2013 Starts RehAid (re UPnRIDE Robotics), maker of the UPnRIDE, a Segway-like device that allows handicapped people to travel outdoors while standing.

**2014** June 2014 The ReWalk gains FDA approval to sell the device to the U.S. public.

**2015** September 2014 ReWalk Robotics goes public on NASDAQ.