Product Development of the Lilypad Scale, a weight scale for wheelchair users

Molly Farison, Co-founder and CEO, Lilypad Scales
www.lilypadscales.com
Molly Farison Bio

• Background in Electrical and Computer Engineering
• Did undergrad at Olin College of Engineering in Needham, MA
• The idea for Lilypad Scales came out of a design class at Olin College
• Started Lilypad Scales in Jan 2013
• The Lilypad Scale for manual wheelchairs hit the market in July 2015
The Lilypad Scale
Independence
The Invisible Scale

The Need: Weight is a huge factor in the quality of life for wheelchair users. Being overweight creates and amplifies dangerous health problems, such as pressure sores. Along with limited opportunities for proper exercise, wheelchair users struggle to weigh themselves consistently, usually having to wait for the occasional doctor’s visit.

There is a large need among wheelchair users for a way to easily and consistently weigh themselves.

The Wheelchair User:

User 1
Spiff lives for his wheelchair basketball team, keeping himself well in shape for the next game.

User 2
Ingrid cares strongly about helping her fellow wheelchair users stay healthy.

User 3
Gerald enjoys maintaining himself in the comfort and convenience of his own home.

User 4
Emma tries to stay as healthy as possible to see her grandchildren another day.

Solution:
The Invisible Scale

Live a Normal Life

Inconspicuous in the home

Maintain weight

Health: With the scale being available at home, our users can now weigh themselves frequently and thus avoid health problems associated with weight.

Normalcy: This scale functions much like the average scale and does not look like a medical device which makes our users feel like there are no special accommodations. Furthermore, it inconspicuously fits right in the average home.

Wireless Remote for instant read

Access weight progress whenever, wherever!

Mesh grid of Strain gauges measures weight accurately

Hard base allows accurate readings on most surfaces

Independence: The ease and accessibility of the mat allows the users to weigh themselves without any external dependency.
Early Works Like Prototype
Codesign
New Prototype
Learning business skills
Raising Money

- Friends and Family: $85k
- Rough Draft Ventures: $15k
- Babson BETA Challenge: $20k
- Boynton Angels: $500k $65k
Bootstrapping

• Used Olin College resources
• Doing engineering ourselves
• Bought 2 3D printers
• MassChallenge advice
• Free office space
• Employee for equity
• Efficient with consultants
Prototype to Manufacturing

- If at all possible, get terms
- Don’t do everything yourself
- Find a partner willing to bend over backwards for you
- Use their sourcing when possible (terms)
- Design for assembly
Questions?

Molly Farison, Co-founder and CEO, Lilypad Scales
www.lilypadscales.com
molly@lilypadscales.com