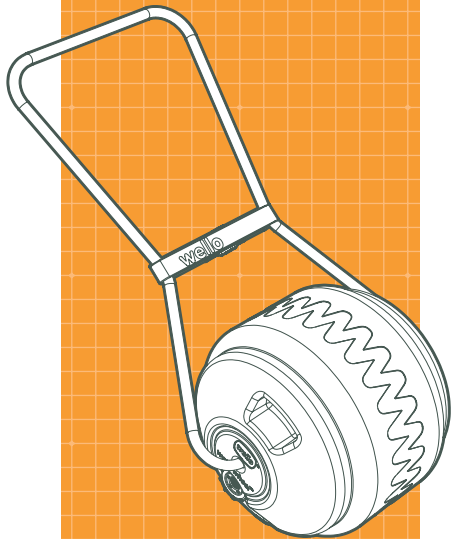


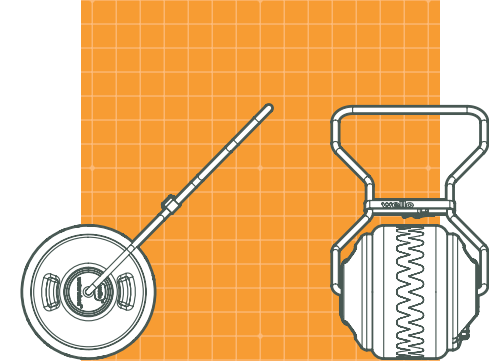
Water Wheel™

Water Transport

India

Client: Wello





Objective: To create a better device for both water transport and storage.

Context: Wello is a social enterprise with an ambitious mission to deliver clean water to a thirsty world. They came to Catapult with a simple plastic barrel that rolls along the ground enabling water transport for families who live far from water sources. While their original WaterWheel™ did transport water, it did not empty fully, was too heavy, and posed other challenges to implementation. To help drive product adoption and sales, Wello needed to tune their WaterWheel™ to the local market.

Process: Catapult spent the first 30 days of this design challenge in Rajasthan, India, with Wello and their local partners. During this time we gleaned water habits, audited customer needs, documented local water management history, learned about local aesthetic, audited common materials, and met with potential design partners and manufacturers. The team guided Wello through several rounds of concept testing and iterations, in villages and in the studio, before we arrived at a form that satisfied the brief and was manufacturable.

Innovation & Impact: The new and improved WaterWheel™ reduces the weight by 30kg when loaded. In discovering that storage of water is as important to users as transport, we designed an angular form mimicking ancient containers that strengthens the walls, and allows for easy and complete pouring. The form can also balance unassisted on each angular surface full or empty, making it easy to transfer from transport to storage mode. We added a Wello logo pattern in the footprint, improved handle design and locking strap, and provided a port to allow attachment to additional devices such as taps, pumps, or filters. To date, Wello has sold over 10,000 units and has forecasted over 50,000 by 2020.

Images

Opposite: Woman with Wello WaterWheel™ holding traditional water container

1. Being shown the seasonal water sources in rural Rajasthan
2. Women tell us water collection stories near the Pakistani border
3. Children testing different prototypes in Eastern Rajasthan
4. Talking design with users via a 1:10 scale 3D printed model
5. Testing different barrel design forms and features with users
6. Hundreds of Wello WaterWheel's™ in the factory awaiting distribution.