



Success in **Operations**

Chicago manufacturer leverages Illinois Manufacturing Innovation Voucher to develop and launch a ground-breaking new product locally and internationally.

PEDALCELL: PRODUCT DEVELOPMENT

 5 Employees  Chicago, Illinois  www.pedalcell.com

SITUATION

Staying charged is a common problem among cyclists, especially bikepackers (people who go on remote bike trips for days or weeks at a time). When Co-Founders Adam Hokin and Vishaal Mali launched PedalCell in 2015, a major part of their mission was to encourage sustainability by “getting more butts on bikes and less in cars.” However, they observed the largest barrier for bicycle adoption was power. Unlike your office, home, or car, access to a continuous and stable power source is limited for cyclists.

For PedalCell, the main challenge was developing a brand-new product with no reference designs. They assembled an expert team of product developers and lawyers to take PedalCell on a journey from concept to reality. This allowed them to reach the point where the technology was in place for them to seek - and implement - feedback from product testers, industry experts, and successfully file one patent.

The larger part of the bikepacking market is located in Europe, Canada, and Australia. And, with COVID-19 in the mix, bike sales in this segment grew by 144% due to more people seeking safe and fun ways to exercise. With such an excellent market opportunity, the team needed to go through steps to optimize their processes for mass production and ensure their intellectual property was protected. This meant optimizing cost of goods sold, sourcing suppliers, tasking new components to make sure they are scalable, and filing more patents.

PedalCell learned about the [IMEC Illinois Manufacturing Innovation Voucher](#) program and applied in January 2020 for a multifaceted project centered around intellectual property and product development.

SOLUTION

For Hokin and his team, the IMEC solution came at the right time. The resources received helped them move the needle on their product launch. Much to the team’s satisfaction, they were able to secure the capital needed for three additional patents, personnel to test equipment and fixtures, and ultimately manufacture and launch the product. “IMEC allowed us to move forward in our decision and made our company more appealing to investors. We have raised capital before and had 1 patent pending. Since working with IMEC, we now have 4 patents with 1 granted and 3 others pending. The program catalyzed our success.” Said Hokin.

The entire project was a positive experience for all involved. Despite COVID-19 throwing a wrench in the original timeline to launch, the company still accomplished its goals and gained efficiencies in their project management along the way. Square One Product Development and K&L Gates LLP were the key service providers used by PedalCell. In addition, the IMEC team of experts provided guidance on maximizing value from funding and the PedalCell team appreciated this approach. “There’s something to be said about a program that commits you to plan how the funds will be dispersed over a set timeline with a clear end-goal. This project made sense as we are hyper-focused on one product line. I would recommend any hardware-related company in Illinois to take a look at the services that IMEC offers and commit to innovation. This



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program was a huge success for us and I look forward to working with them in the future.”

RESULTS

- Launched new product in domestic and international markets
- Significant reduction in cost of goods sold
- Product compatibility improved by 50% in terms of bike designs
- Filed 4 aggregate patents
- Doubled market potential by having patent filed for international protection

“ When you have an electromechanical product, you need to ensure that your systems integration is covered- IMEC allowed us to do that by assisting with product development and protecting our intellectual property. The work was a pivotal component of our launch strategy. ”

Adam Hokin, Co-Founder – PedalCell



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