

Recognizing Opportunities and Generating Ideas

OPENING PROFILE

WIIVV

Solving Foot Pain and Fatigue via Custom Fitted 3D Printed Insoles

• Web: <https://wiivv.com> • Facebook: [wiivvit](#) • Twitter: [@wiivvit](#)

MyLab Entrepreneurship

★ Improve Your Grade!

If your instructor is using MyLab Entrepreneurship, visit www.pearson.com/mylab/entrepreneurship for videos, simulations, and writing exercises.

Shamil Hargovan and Louis-Victor (LV) Jadavji met at a 3D printing conference in 2013. They quickly discovered that they had two things in common: first, they were both affiliated with Claremont McKenna College in California—Hargovan as an alumni and Jadavji as a student—and second, they both had an active interest in 3D printing.

After the conference, Hargovan and Jadavji kept in touch. At the time, Hargovan worked for Hewlett-Packard as a Group Product Manager and 3D Printing Lead. Jadavji remained in school and worked for a software company in the San Francisco Bay area. The two continued to share their interest in 3D printing. Hargovan was kicking around several ideas, outside his job at HP, including using 3D printing to create products for athletes, such as helmets. In early 2014, Jadavji had a bad experience with a pair of orthotics, and the thought occurred to him to utilize 3D printing to create customized, affordable insoles that would provide users maximum support.

In April of that year, Hargovan and Jadavji decided to work together on the 3D printed insoles idea. The idea made sense on several levels. First, many people have trouble with their feet and struggle to find a solution. Individuals who spend hours a day standing or walking, such as nurses and security guards, are the most susceptible. Second, there was a gap in the marketplace for products to help people with foot fatigue and other issues. On one end of the market were custom orthotics, which cost \$400 or more. Along with the cost, being fitted for orthotics usually requires a visit to a podiatrist and is a time-consuming process. On the other end of the market were inexpensive insoles, which are basically small cushions you put in your shoes. Because the insoles aren't custom fitted, they often don't fit right or provide adequate support. What was missing was a product in the middle—a quality, custom fitted insole that could be obtained quickly at an affordable price. That was the sweet spot that Hargovan and Jadavji felt 3D printing was ideally suited to accommodate.

Wiivv, the company the two started, took shape in 2014 and 2015. It took time for the idea to be fleshed out and for the manufacturing process to be developed and the product to be tested. To test the process and product, Wiivv assembled a group of people called the Wiivv 100. These were people who spent a lot of time on their feet, and who beta tested the custom printed insoles Wiivv was 3D printing. The group was utilized for

LEARNING OBJECTIVES

After studying this chapter you should be ready to:

1. Explain the difference between opportunities and ideas.
2. Describe the three general approaches entrepreneurs use to identify opportunities.
3. Discuss the personal characteristics of entrepreneurs that contribute to their ability to recognize business opportunities.
4. Identify and describe techniques entrepreneurs use to generate ideas.

six months and saw the product through 72 iterations. Some of the testers were surveyed and others were brought into Wiivv's offices to be interviewed and for their insoles to be examined (after various lengths and types of use). The Wiivv 100 ultimately became strong advocates for the product and spread the word about Wiivv via social media.

Wiivv launched in early 2016 via a Kickstarter campaign. The campaign raised \$235,054 and had 2,765 backers. The idea for the campaign wasn't so much to raise money, but to validate that there was a market for high-quality, 3D-printed custom insoles at a modest price. If you'd like to look at Wiivv's Kickstarter campaign, which includes a video, go to www.kickstarter.com and type in Wiivv. The campaign was successful and was the largest Kickstarter campaign at the time for a 3D printed product. The market validation that the campaign provided also helped Wiivv raise money from investors down the road and generated substantial positive publicity.

The way Wiivv works is really cool. To purchase a Wiivv custom insole, you start by going to Wiivv's website to buy a purchase code. The code costs \$69 or \$89, depending on the insole you buy. You then download the Wiivv app, watch a short tutorial, and tailor the insole to your liking. You can pick from various colors (for the bottom) and patterns (for the top). You then take five photos of your feet using your smartphone. The app guides you through the process, which doesn't take more than a few minutes. You finish up via a standard checkout process. In 7–14 days, your custom insoles arrive in the mail. Using the insoles is easy. You just place them in your shoes. You can slip the insoles in and out of all the shoes you own. Most people immediately notice a difference in terms of less foot fatigue. If you are not completely satisfied, Wiivv provides a 30-day satisfaction guarantee.

Behind the scenes, Wiivv's operations are complex. To manufacture the insoles, the firm uses a process called adaptive manufacturing. The part of the insole that provides a custom fit is 3D printed, and the rest is built via traditional manufacturing processes. A lot of thought regarding the user experience went into how the insoles are ordered and the photos are taken. Once the photos reach Wiivv, they are turned into data that Wiivv's commercial-grade 3D printers can understand. All of Wiivv's products are manufactured in San Diego, CA.

To grow its business, Wiivv has raised \$7.88 million through two seed rounds and a Series A round. Wiivv's ultimate vision is to add active mental years to people's lives by producing custom fit footwear, orthopedics, and wearable products that encourage them to lead a more active lifestyle. A second line of products, in addition to insoles, is in the works but has yet to be announced publicly.

In this chapter, we discuss the importance of understanding the difference between ideas and opportunities. While ideas are interesting and can intrigue us as possibilities, not every idea is in fact the source of an opportunity for an entrepreneur to pursue. In addition to describing the differences between ideas and opportunities, this chapter also discusses approaches entrepreneurs use to spot opportunities, as well as factors or conditions in the external environment that may result in opportunities. As you will see, too, certain characteristics seem to be associated with individuals who are adept at spotting viable business opportunities.

The Differences Between Opportunities and Ideas

LEARNING OBJECTIVE

1. Explain the difference between opportunities and ideas.

Essentially, entrepreneurs recognize an opportunity and turn it into a successful business.¹ An **opportunity** is a favorable set of circumstances that creates a need for a new product, service, or business. Most entrepreneurial ventures