

# Roller Bottle

*Roll it Out*



**The Water Bottle That Functions as a Muscle Roller!**

Cameron Roberts  
APEC 3551 Fall 2022

# Roller Bottle Executive Summary

**Product Owner:** Cameron Roberts

## Product Description

The Roller Bottle combines hydration and muscle recovery by providing hikers with a water bottle that functions as a muscle roller, in order to get hikers back on the trail after a short break feeling refreshed and recovered, faster. The avid hiker packs their gear wisely, keeping the weight on their back under 15 lbs. Roller Bottle is a revolutionary product that gives the hiker a means for the essential requirement of hydration with the advantage of reducing muscle fatigue by rolling out sore legs, without taking up valuable space and weight.

## Opportunity

Roller Bottle solves problems that every hiker has encountered, sore muscles holding them back from walking their preferred pace, and an overpacked backpack that just seems to get heavier and heavier as the hike continues. Every single hiker carries a water bottle with them, even those going on a nice and easy day hike for a couple of miles will carry one in their hand. Now, they can have a convenient muscle roller on hand at all times with Roller Bottle's outer shell made of recycled wine corks, providing a deep tissue massage at any moment. There are over 8 million hikers that are college age (18-24), most of which are familiar with the benefits of muscle rolling, and will appreciate the sustainable materials that make up the product.

## Innovative Solution

For the avid hiker, mind and body must be working in perfect unison at all times. Muscle recovery is an essential aspect of a successful hike, but for the average hiker, this can only be accomplished by sitting and waiting for sore legs to go away. Muscle rollers are valuable in that they decrease recovery times, but they can be bulky and heavy. If a hiker only has room for one more thing in their pack, they will choose a water bottle over a roller every time. The Roller Bottle eliminates the need to choose, as it will not weigh the hiker down when you set them for their hike. Every hiker is sure to bring water with them, but only hikers with enough room and weight to spare would even consider packing a muscle roller. However, they would surely like to have one. Luckily, the Roller Bottle's water bottle core is made out of BPA-free, recyclable, and reusable plastic that provides a durable and rigid surface to roll, and the outer shell is made of recycled wine bottle corks, halved, that line the entire surface area of the bottle itself. This unique shape boasts ridges and valleys that are sure to penetrate deep into muscle tissue, and weighs next to nothing.

## Value Proposition

Most hikers, especially thru-hikers that seek to cover thousands of miles over the course of multiple months, will only pack what they absolutely require. They will seek any innovative solution to cut down even just a couple of grams of weight, as they understand the value of what they carry on their backs, and will look for any lightweight alternative for what they want to bring. Typically, a muscle roller does not fit into the equation so hikers

will roll out their legs with sticks, rocks, or their hands to relieve soreness. Although this provides short-term satisfaction, it can not compare to the sensation or recovery that a deep tissue massage provides. While planning for their upcoming hike, a hiker can order from Roller Bottle's website and have their bottle delivered directly to their house. No need to make extra space or consider the weight, it weighs under a quarter of a pound and is the same width as most 32 oz bottles that hikers use, due to its slim and compact design.

## **Competitive Advantage**

Roller Bottle's main competition is MOBOT, who manufactures a bottle made out of stainless steel with a foam textured exterior that can be used to roll out muscles. Roller Bottle has the same price point as MOBOT at \$49.99, however, Roller Bottle only weighs less than a quarter pound compared to MOBOT's 1.7 lb water bottle. While packing for a hike, weight adds up fast and most experienced hikers who are preparing for a long hike would rarely choose to bring a metal bottle. Roller Bottle's main advantage lies in its cork exterior. Most hikers who choose to bring a muscle roller will often choose a small ball made of cork, due to its compactness and low weight, which is where the original inspiration for Roller Bottle came from.

## **Entrepreneurial Team**

Roller Bottle's team will start out small to begin with. Owner Cameron Roberts will handle the managerial duties while the CFO will be responsible for the financial side of things. Roller Bottle's marketing manager will handle website maintenance and troubleshooting, as well as advertising. Most importantly, four warehouse employees will be in charge of producing the product, which will include splitting the wine corks and assembling and adhering the outer shell to the bottle, then packaging the bottles as orders come in. The warehouse will ship out once a day via UPS in order to assure the consumer that they receive their bottle in 3-5 business days. Hiking influencers on TikTok will get the word out to consumers, demonstrating the product and discussing the features and benefits that the roller provides. Roller Bottle will also make it a priority to get the Roller Bottle in sporting goods and hiking stores such as Dick's Sporting Goods and REI.

## **Financial Highlights**

Roller Bottle is in early stages of development, focusing on creating the best possible design for the shell. Early investment will be a vital aspect of kickstarting the business. Early financial projections look promising, with total direct cost being \$14.63 per unit, Gross Profit per unit is \$35.36. The yearly breakeven point for the prototype is 16,491 units sold (45 units daily). This is merely a starting point, as Roller Bottle will provide 10 hikers with prototypes and seek feedback on the product. After receiving positive feedback, the production process will switch to a molded outer shell made out of recycled cork to improve speed of production. In order to cover rent and materials, as well as labor and a reasonable marketing budget after the switch, Roller Bottle will require \$600,000 for a comfortable start.

## Consumer Problem Proof

### **Roller Bottle**

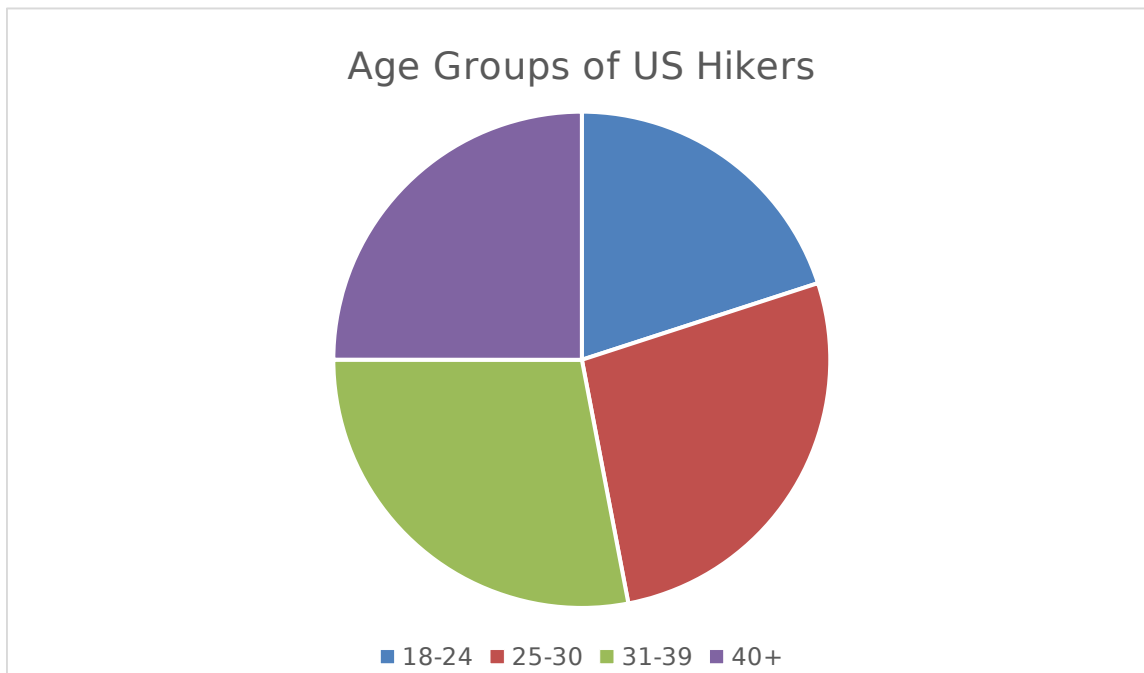
*The Water Bottle That Functions as a Muscle Roller*

Out on the trail for another 25-mile hike today and you're already 10 miles in, starting to feel the weight of that pack getting heavier and heavier with each step. It's certainly time for a break. Don't let leg fatigue stop you from reaching your goals, use your Roller Bottle to roll your legs out, take a drink of water, and get back on the trail feeling fresh and hydrated. No more 30-minute breaks waiting for those cramps to go away, the Roller Bottle has a built-in muscle roller on the outside. You'll be back to walking in no time! And don't worry about digging out all of your gear to reach it, the Roller Bottle is only an inch thicker in diameter than your old 32oz bottle, and fits right in the side pocket of your pack! Concerned about exceeding your weight limit? Of course you are, but don't worry. Roller Bottle weighs less than a quarter of a pound. The bottle is made from a BPA-free plastic and the outer shell is formed from recycled wine corks, so you can rest easy knowing that you're using an environmentally sustainable product.



Over 8 million people between the ages 18-24 years old consider themselves avid hikers. The vast majority of hikers in this age group are aware of the benefits of muscle rolling, but would not consider bringing a muscle roller with them on a hike due to the extra weight and bulk. Bringing one unnecessary item with you on a hike could make or break reaching your goal for the day. But muscle fatigue is a killer. With a muscle roller on hand, a hiker would be able to take less time to recover, and spend more time in which there is day light on the trail. Hikers that do not have the luxury of bringing a muscle roller with them on their hike are going to spend more time in pain and less time walking due to fatigue. Any time spent walking will be less effective as walking pace will

be substantially slower than if a roller was on hand to alleviate cramps. For many, the sacrifice of muscle fatigue is worth saving the extra space and weight that a muscle roller would take up. The age demographic of 18-24 is important because muscle rollers have only become a widespread trend in the last 10 years. Hikers in an older age demographic might be set in their ways, and bring the same things with them on every hike. The young hikers are naturally more open to experiment and try new things, and are likely more open to giving an innovative product a chance. This is the lowest percentage age group for US hikers, as shown below, but is a good place to start, especially if they can be reached through an outlet like TikTok or Instagram, which is the main marketing strategy for Roller Bottle.



### **Product Problem Proof**

Roller Bottle solves the issue of break times during a long hike being too lengthy, keeping hikers nursing their cramps instead of staying on trail. It solves this problem by providing a convenient solution in the form of a muscle roller that is in your hand whenever you take a drink. Any time you go for a drink, you can roll your legs out. This advantage means far less muscle fatigue throughout the hike, meaning a hiker can walk farther, faster. The Roller Bottle provides a huge benefit in the fact that it only weighs a .24 pounds, which means it will not weigh the hiker down any more than a normal water bottle would. The main reason that hikers choose not to bring muscle rollers is that they are too heavy and take up too much space. Roller Bottle is only an extra inch in diameter and takes up virtually no extra weight due to the outer shell being made of cork, one of the most lightweight solid materials available. It is also sustainable since the cork is completely recycled and the plastic is BPA-free. Hikers age 18-24 are characteristically passionate about the environment. It also has an outdoorsy-type aesthetic to it as seen below. The pictures provided are of a prototype product which will be available to 10 hikers tasked with testing the product out. The main challenge with developing a scalable unit that can be

sold in mass quantities will be finding a outlet that has the ability to supply a lot of cork, and finding a more efficient way to make the outer shell as opposed to gluing wine corks onto the outside.



### **Market Problem Proof**

The market for muscle roller water bottles is uncharted territory for the most part, with only one competitor offering a similar product to the Roller Bottle. This is one of the reasons for the creation of Roller Bottle. There is low competition in the market which makes for easy entry. Offering a lighter weight and more sustainable version of the bottle will hopefully attract young consumers who care about the environment, as well as individuals who have a reason to buy a lighter product versus a heavier one, such as hikers or athletes who have to fit all of their gear into a small space. The most successful water bottles that hikers use are all sustainable and lightweight, so if Roller Bottle can provide that same advantage, with the added benefit of providing users with a quick and easy way to recover their muscles, the future could be very bright. It seems that the Roller Bottle displays a differentiator type entry strategy, as there is a competitor that offers a similar type of product, but the competitor cannot offer the same features and benefits that Roller Bottle offers. To begin with, Roller Bottle will focus it's market on 18-24 year old avid hikers because we believe that hikers can get the maximum benefit from Roller Bottle's features. Weight of the product will be more important to them as opposed to an athlete who is simply looking for a convenient way to roll their muscles out at the gym. That is not to say that people other than hikers would not get use out of the product, because anyone that does any amount of physical activity could see great value in the prospect of having a muscle roller attached to the water bottle that they take with them. For now, in the early stages of development, Roller Bottle will focus on the 18-24 year old hiker market, in which sustainable products are very popular, and the hikers are not as set in their ways as much as older hikers. There are over 8 million hikers in the United States that are under 24 years old, which means that if each one buys a Roller Bottle, there is \$400,000,000 in revenue to be made just off of young people. Now, the largest social media app in the world for people of that age range is TikTok, and many young people who follow hiking influencers on the app are hikers themselves. So, if Roller Bottle can employ a few hiking influencers on TikTok as brand ambassadors who spread the message about the product, that could be an effective method of reaching more young hikers who like the idea and want to give it a try.

Roller Bottle -32oz	MOBOT Muscle Roller Water Bottle - 27oz
\$49.99	\$49.99
0.42 lbs	1.7 lbs
Recycled cork outer shell	EVA foam outer shell

## **Business Model Problem Proof**

Once Roller Bottle makes it into stores, the Roller Bottle will be displayed with the other water bottles that are available for purchase, similar to online shopping on Amazon or a simple Google search for hiking water bottles. A hiker shopping for a water bottle in person will definitely pick up the Roller Bottle, as they have likely never seen a product similar to it and will be intrigued at the prospect of the muscle roller/ water bottle combination, assuming they are aware of the benefits that that muscle roller provides for recovery. If the competitor muscle roller is offered in the store, it will most likely be next to the Roller Bottle, so they will pick up both and immediately feel how much lighter the Roller Bottle is than the competitor. Although the competitor provides the same benefit of decreasing down time on a hike and preventing leg fatigue, the consumer will purchase the Roller Bottle because of the weight savings and sustainable design. The same holds true for online purchasing. A consumer shopping online for a water bottle that they plan to take with them on a hike will opt for the Roller Bottle over the competitor muscle roller water bottle because of the weight savings, and choose the Roller Bottle over another water bottle because they will be excited at the prospect of hiking further and faster with less leg fatigue. Because of these reasons, consumers buying online and in store will make Roller Bottle their first choice and should help reach the goal of \$1,000,000 in revenue. Customers who order online will receive their order in 3-5 business days in the mail, and since most thru-hikers plan what they are packing for months ahead, they will receive their Roller Bottle before they set out for their hike. If they are a consistent hiker, they will continue to use the bottle, even after their hike is completed, taking it to work and to exercise because it always feels good to roll your legs out, even if you are not super sore. As of right now the only size and color we are planning to offer is 32oz (the most common for hikers) in a black colorway. The reason for this is to keep the production process as simple as possible for the time being, and to see if customers are providing positive feedback on it. After reaching our goal of \$1,000,000 in revenue, we will consider expanding to other sizes and colors. Color only effects the cap of the bottle, as the outer shell will always be the same color cork. In order to reach \$1,000,000 in profit we will need to sell 28,281 units. The cost of cork for a single bottle is \$7.41 and the cost of the bottle itself is \$7.22. This is a total direct cost of \$14.63 per bottle which provides a profit of \$35.36 per bottle. For our current production plan, our yearly breakeven point is \$12,168 and our monthly breakeven point is \$1,014. To hit these numbers we will need to sell 45 bottles a day, our current production rate is 48 bottles a day making them by hand between our projected 10 manufacturing employees.



				<b>METRICS</b>		
<b>BASELINE 1:</b>	<i>If We Charge This:</i>	\$49.00		<b>Your Biz Idea</b>		
<b>BASELINE 2:</b>	<i>And Our Costs Are:</i>		<b>LABOR + COMMISSIONS + ROYALTIES</b>			
		\$14.63	<b>MATERIALS + DIRECT MFG COSTS</b>			
		\$14.63	<b>TOTAL DIRECT COSTS</b>			
<b>BASELINE 3:</b>	<i>Gross Profit per unit:</i>	\$34.37	70.1%	<i>Gross Contribution Margin</i>		
<b>BASELINE 4:</b>	<i>Monthly Burn Rate is:</i>	\$34,850				
<b>BASELINE 5:</b>	<i>Breakeven at:</i>	12,168	3,042	1,014	234	33
		<i>Per: YEAR</i>	<i>QTR</i>	<i>MONTH</i>	<i>WEEK</i>	<i>DAY</i>

## Operations/Commercialization Problem Proof

Our current production process is not our long-term production process. We are currently producing the Roller Bottles by cutting recycled wine corks in half and then adhering them to the outside of the bottle. This is not a scalable process and we understand that this process would take far too much time to manufacture at a large scale. We do not intend on having one hundred people in a room all cutting wine corks in half and gluing them together with water bottles. The MBV figures and long term revenue goals are all in the context of this current production process, yes, but that is just for the sake of proving that manufacturing Roller Bottles, even in the way that we do it, is possible to reach our goals as long as the consumer is buying. In order to create more business, we will put our marketing plan in motion, centering around getting the word out via TikTok hiking influencers to reach the target market of 18-24 year old hikers. If we can reach a large number of young hikers through social media, we have a good chance of them buying because they want to stay young, and the Roller Bottle will maintain muscle tissue to a far better degree than hiking without a muscle roller. Once the 10 original prototypes are purchased and used, we will get in touch with the buyers and ask for feedback. We will make any suggested improvements and, if the feedback is positive, will continue onto the next phase of our business plan which will involve scaling. This will require us to find a reliable vendor for processed recycled cork, and we will need to develop a mold to cut the cork into the shape of the shell. The shell will be the exact same pattern, but one single piece of cork all the way around, with the same peaks and valleys of the prototype. We will then need to revise our operations and run a new long term business model. Hiring a large manufacturing team to put the bottles together will be important, as well as someone to manage finances, and rent out a building to manufacture and run the business in.

## Resource Problem Proof

We are aware that there are some logic and strategy gaps that need to be addressed. We have not planned out very far beyond the initial product testing with our prototypes and this is because we simply do not know how the consumers will react to the Roller Bottle's performance. We are confident in the benefits that it can provide for the hiker, but there is always the possibility that the consumers find the product pointless and don't find as much value in the benefits of muscle rolling, the weight savings, the sustainable design, or the convenience of the combination as we think that they will. In a market that has little competition, aside from another muscle roller water bottle that has not nearly reached the levels of popularity that we anticipate. Realistically, we do not have figures or calculations based around anything that might happen after initial product testing, we simply have a vision and big ideas for what we believe the product could become in the future. Because of our confidence in how we match up against our competitor, we have also not done a ton of research in terms of what they have to offer, only what the consumer might see if they are shopping online. We also do not have a sturdy plan for how much cork we will be purchasing at one time in bulk, or what the most efficient means of producing this product at a large scale would be. We are not looking much farther than initial testing, getting the product out to 10 hikers, giving them 6 months to try it out before asking for feedback. Because of this, we do not need any additional funding at the moment, because we have paid for all of the material needed for the manufacturing of the first 10 roller bottles, and will make them by hand. If we receive positive feedback, we will go back to the drawing board and revise the parts of our plan we are missing. We will need to figure out who will supply the cork, how much the cork will cost, how do you even make a mold out of cork, how will we get this in stores, who is going to develop the website, how much will the website, rent, distribution, and labor cost. After we have solved these problems, we will return and will request \$600,000 to get started, which of course is a rough estimate based on the calculations we have done for our current strategy.

## **Recommendation**

Considering all of this, we are going to move forward with selling the 10 prototypes, in fact, the hikers that we interviewed to get a better idea of the consumer's wants and needs, have already agreed to purchase them at the \$49.99 price point. We are going to give them 6 months, considering that winter is no time to be out hiking in the first place. We will not need any additional resources for this part of the process. Once we receive positive feedback and we know the product does what we think it will do, we will make a request for \$600,000 to kickstart the long-term business plan. The reason we will not make a request at this time is that, although we think we have a firm grasp on the market, the Roller Bottle seeks to solve a problem that has not been solved yet, and we want to make sure that there are legs for this idea. We will have 6 months to devise a plan for getting the product in stores and starting an online shop. We will also hire more staff and start getting in touch with influencers who can help spread the word via social media. The feedback will also allow us to get a firmer grasp on our customer base and potentially expand our sights to more age groups and different experience levels of hiker. There are a lot more hikers in the US than just young people,

and we know that there are more people besides hikers who would love the idea. Before we get to all that, we want to start small and ensure that the product is well received by our target demographic.

## Concept Portfolio

### **Roller Bottle**

*The Water Bottle That Functions as a Muscle Roller*

Hiking is all about experiencing nature the way it was meant to be experienced. Braving the wilderness is an intimate and gratifying experience that provides new challenges, new thoughts, and new accomplishment every day. But it's impossible to appreciate the great outdoors when the only thing you can think about is how bad your legs hurt from walking all day. The Roller Bottle provides an environmentally conscious way to get rid of muscle soreness and get back focusing on the beauty around you. The lightweight cork outer shell is completely recycled and just looks like it belongs outside, so take it outside! It's so light and slim that it can be carried in a bag or by hand and you'll forget that you're holding it until you need it. Get back to enjoying nature and forget about those stiff muscles.

Price: \$49.99- 32oz



This concept with the intention of convincing REI to sell Roller Bottle in their stores. When picking a store to target, we wanted to identify the organization that seems to have the biggest passion for the hiking, sticking to our main target demographic of 18-24 year old hikers, who shop there. After some research, we discovered that REI's mission is all about sustainability and connection to the outdoors, so that is the focus of this concept.

## Presentation Slides

# Roller Bottle

*The water bottle that functions as a muscle roller!*

Cameron Roberts  
APEC 3551 Fall 2022



## The Problem

- Normal muscle rollers are heavy and bulky
- Thru-Hikers need to conserve space and weight in their pack
- It takes a long time for muscles to recover during a long hike



## The Solution

- The outer shell is made of cork, a very lightweight substance
- The roller is attached to the bottle, doesn't take up extra space in the pack
- Everyone brings a water bottle, very convenient to have on hand



## How it Works

- Recycled wine corks and BPA-free plastic for an environmentally conscious product
- No need to empty your backpack
- Recover muscles substantially faster



## How its Made

- Wine corks are halved and adhered to the inner core
- Available online for delivery or at sporting goods stores
- Marketed by ambassadors, hiking influencers on TikTok



## Let's Go!

- \$35.36 profit on every unit sold
- 28,281 units to reach \$1,000,000 in profit
- \$600,000 investment to get started





# Thank You!

Roller Bottle  
Cameron Roberts  
APEC 3551



