

## Cycling Soars: The Case of Sprockets Bike Shop

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### Abstract

This is a case set in 2021, a year after the worldwide coronavirus pandemic began. Mike Roberts is the owner of Sprockets Bike Shop located in South Florida. Before the pandemic, the bicycle industry was stagnant, and sales were average across the country. The market now faces a different scenario which is a surge in sales. Competitors are performing well, and Mr. Roberts begins to explore how Sprockets will continue to have a competitive advantage and remain successful in the market as the pandemic gradually dissipates.

By using information from the bicycle industry, this case will put students in the role of Mr. Roberts as the owner of a bicycle shop. Students will learn about the bicycle industry and leverage analytic tools to diagnosis competitive market conditions. Based on the results of that examination, students will then determine the competitive strategy used by Sprockets Bike Shop. At the conclusion of this case study, students will be familiar with analyzing competitive market pressures a business will face and determine the competitive strategy to implement to combat those forces, gaining an advantage over rivals.

The Sprockets Bike Shop case applies to foundations of business strategy, strategy formulation, and competitive strategy courses.

Keywords: Competitive advantage, competitive strategies, five forces framework, strategic decision making, strategic analysis

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## INTRODUCTION

After a long 10-hour day at Sprockets Bike Shop, Mike Roberts is exhausted and excited. He is also curious as to what the future will be for his bicycle shop. Mike has sold off-the-rack and custom handmade bicycles in South Florida for over 25 years. His business has grown tremendously over this period and become extremely successful. Mike has seen trends in the market but has never experienced anything like what has happened over the past twelve months. A drastic surge in the bicycle industry occurred, impacting bike shops across the county, including Sprockets. The cause of this surge is directly related to the worldwide coronavirus pandemic that has impacted the lives of many individuals.

Before the surge, Sprockets, like many other bike shops, were in an industry in a state of stagnation. The industry was going through a shakeout period. Still, Mike remained successful by providing high-quality products at great prices and, more importantly, offering superior customer service. Being in the industry for as long as Mike has been, he had successfully negotiated prices with vendors supplying parts for custom bikes. Additionally, since Sprockets is an authorized dealer, Mike could buy standard bikes wholesale from vendors reducing his costs. This allowed Mike to offer lower prices to customers than other bicycle shops in the South Florida market and provided a competitive advantage to the business.

With sales soaring due to the pandemic, Sprockets and many other bike shops are performing well. However, Mike is concerned about how long this trend in the bicycle market will remain. Can Sprockets continue to be competitive as other bicycle shops adjust their strategies to gain more of the market? Are there tactics that the business should be pursuing now while the market is doing well? Will the industry revert to a state of stagnation again once the surge dissipates? Should Sprockets pursue an alternative competitive strategy? These questions and others are what keep Mike up at night.

Mr. Roberts wants to eventually pass the business on to his kids and ensure that Sprockets is around for another 25 years. He has decided to work with his son, who is on break from university and has just completed an undergraduate strategy course to answer the many questions posed. Mike plans to thoroughly examine his business, the bicycle industry, and the South Florida market to ensure that the most effective competitive strategy is being pursued. The five forces framework, an analytic tool, will be leveraged to diagnose the competitive conditions and aid Mike in his analysis.

## BICYCLE INDUSTRY

Before 2020, the bicycle industry in the U.S. was in a state of stagnation. As indicated in Figure 1 (Appendix), average U.S. sales from 2016 through 2019 were \$6 billion annually. However, the industry was drastically impacted in 2020 because of the worldwide coronavirus pandemic. Americans spent roughly \$6.9 billion in 2020, up from \$6.1 billion in the previous year (Richter, 2021). The trend in bicycle sales continued into 2021, and by Q1, the industry reached 8.2 billion (Richter, 2021). Recent forecasts indicate that by the end of 2021, the U.S. bicycle industry will reach \$9 billion in sales. By 2030, estimates show that the global bicycle market will reach \$82 billion in sales (Transparency Market Research, 2020).

Even though bicycles have been around since the 18th century, they have evolved to become more than just a mode of transportation. Today, bikes are used by individuals seeking alternative forms of exercise rather than going to facilities such as a gym. Additionally, bicycles

are used for recreation by individuals to sightsee and spend time with friends outdoors. As a side effect of the coronavirus pandemic on the bicycle industry, the factors mentioned were exacerbated, influencing individuals to dust off their old bikes or purchase new ones. Many restrictions were placed on businesses throughout the country, such as workout facilities that led to them being temporarily closed or social distance requirements that limited the number of individuals that could be in an establishment. Similarly, individuals seeking to dine out at restaurants with friends and family were faced with challenges. These factors contributed to Americans deciding to stay quarantined in their homes and isolating themselves from others.

The behaviors of individuals were influenced by the pandemic and ignited the surge in the bicycle industry. People were spending much more time at home, and their lifestyles changed. Biking provides an opportunity for individuals to perform recreational activities that benefits their health and wellness. Individuals also find that bicycling is an alternative form of personal enjoyment. Rather than spending money on entertainment or dining out, Americans find that biking provides an ability to self-develop to reduce stress and anxiety. The inability to communicate with others and social distance requirements caused by the pandemic have sparked biking growth. Consumers can appropriately be socially distanced while on their bicycles outside, allowing them to satisfy the need for social engagement with friends and family. Other consumers rely on bicycles for transportation, especially those that live in large cities where owning a car to get around can be difficult and add an unwanted monthly expense.

“One size fits all” is not the case in the bicycle industry. Today, 19 different types of bicycles are available to be purchased by consumers (The 19 different types, n.d.). Selecting the best bike for an individual depends on multiple factors such as the type of terrain to be used on, frame size, suspension type, handlebar type for comfort, wheel size, gear ratio, brake system, and the budget to spent by the consumer. Bicycles can range in cost as low as \$100 to as high as \$20,000, and in the U.S., they average at \$1,500 (*What is the real cost*, n.d.). The most common bicycles purchased include mountain, road, hybrid, recumbent, BMX, and cruiser bikes. Brands include Cannondale, Specialized, GT, Trek, Scott, Salsa, and Kuat. The most popular bicycle purchased by consumers consistently since 2015 is mountain bikes (Balton, 2021). Advancement in the efficiency of rechargeable battery technology has led to the growth in the popularity of electric bikes (E-bikes). Estimations indicate that by 2030, electric bike sales will contribute \$30 billion to the global bicycle market (Jadhav et al., 2021).

To provide a more exact fit and feel of a bicycle to the consumer, experienced bike shops will offer custom handmade products, which as of 2017, are represented by 300 shops across the U.S. (Brewer, 2017). These bikes are built from the ground up and offer significant benefits to a rider than an off-the-rack bicycle. Riders with non-standard body types such as long arms or short torsos will have their measurements taken by the custom bike shop to construct a frame to fit the cyclist. Customized bike's cost at the minimum \$3,000 and will increase in price depending on the type of materials used to build the frame, such as steel, titanium, or carbon fiber. In addition, the craftsmanship that goes into building these bikes reflects in the price, and this will vary based on each shop that offers custom bicycles in the industry.

## **SPROCKETS BIKE SHOP**

Mike Roberts, a South Florida resident, has been a bicycle enthusiast his entire life. As a hobby, he would build handmade road and mountain bicycles out of his garage. He would then give them away as gifts to family members or close friends. Friends and family were always

impressed by the level of craftsmanship Mr. Roberts put into each frame and bike he built. This detailed workmanship caught the eyes of others, and people began asking where these bicycles could be purchased. Mr. Roberts never believed that he could turn his hobby into a business, but with the encouragement of his wife, he decided to take a leap and pursue his dream.

Established in 1996, Sprockets Bike Shop opened in South Florida. It is open seven days a week and markets products sold by using the business website, social media platforms, local newspapers, and by word of mouth. Sprockets do perform bicycle repairs to all bikes either brought in or shipped to the shop. However, the bike shop does not currently provide mobile repairs in South Florida. The bicycle shop employs experienced technicians who have been working there for several years and were taught by Mr. Roberts to build handmade frames. This value driver helps to carry on the craftsmanship that goes into each bike built at the establishment. The shop also offers classes to the public to learn the basic mechanics of a bicycle and how to comfortably fit and ride them.

The shop began originally selling handmade road and mountain bikes. However, it grew to offer various products, including many off-the-rack bicycles and accessories. Bicycles that are off-the-rack are commercially produced in mass quantities. These bikes are available in predetermined sizes and do not consider variations in the leg, arm, and torso lengths. Furthermore, these bicycles do not take into account the flexibility of the rider or their riding style. As an authorized dealer, meaning Mr. Roberts has been given authorization by the manufacturer to sell their products. These off-the-rack bikes allow Mike to sell to a wide range of customers, including those that are infrequent, casual and moving up. The bicycles sold at Sprockets include road, mountain, comfort, cruiser, gravel, BMX, and folding but exclude E-Bikes. Many popular brands include Cannondale, Scott, Trek, Specialized, Salsa, and GT. Customers that are enthusiasts have generally been riding for several years. These individuals are riders that seek to have a custom bicycle made to fit their body type and cycling style. Customers seeking handmade road and mountain bikes can purchase these products by working with a technician at Sprockets or using the online bicycle design web portal.

Sprockets, a business that has been open for 25 years, takes pride in the level of quality and craftsmanship put into each handmade bicycle built, offering great prices, and providing superior customer service. The business, on average, earns \$1 million in revenue each year from 2016-2019. The bike shop has 65% of its sales generated by in-store purchases, and the remaining 35% is from online sales. Years of being in business have allowed Mr. Roberts to build strong relationships with his suppliers. Bicycles off the rack are purchased at a wholesale price by Sprockets and then have a markup of roughly 54%. For example, if Sprockets purchases a wholesale bicycle costing \$325 and sells it for \$500 at a margin (revenue - cost) of \$175 in the shop, their markup would be 54%. This pricing strategy allows the shop to purchase these bicycles at a lower cost and sell them to customers at a markup price that is 15-20% lower than rivals in the South Florida market, giving Sprockets a competitive advantage. This includes bicycles and accessories such as seats, pedals, tires, helmets, grips, pumps, and even water bottles. Bicycles off-the-rack ship 95% assembled. Minor assembly will require the customer to install the seat, pedals, handlebars, and front wheel. If picked up in the store, customers can either have the bicycle fully assembled but incur a small fee of \$45 or decide to take the box home and assemble the remaining 5% of the bike on their own.

Building a custom handmade road or mountain bicycle starts with first taking measurements of the customer. If the customer lives in South Florida or can travel to the shop, measurements will be taken by Mr. Roberts or another employee experienced with building

bicycle frames. If an order is shipped, customers can perform taking the measurements themselves. Consumers would be required to take measurements from areas such as their arm, thigh, inseam, torso, shoulder, and foot. Instructions are available on the Sprockets website that provides a step-by-step guide and diagrams to aid in taking the measurements. After this step is complete, customers can decide on the color and accessories such as the seat, handlebars, brakes, and wheels. Depending on the accessories requested, costs at Sprockets to the customer will range between \$3,000 and \$9,000. Once this step is completed, the next is to determine the type of material to be used to construct the most critical component of a bicycle, which is the frame.

Custom handmade bicycles frames built at Sprockets can be constructed using four different materials: steel, aluminum, titanium, and carbon fiber. As indicated in Figure 2 (Appendix), each material offered has different characteristics that impact price, weight, and labor in developing a bicycle frame. For example, carbon fiber is a very light material typically used by customers who are enthusiast riders or competitively compete in biking events. These individuals do not seek to use steel in constructing their bicycle frame because it is a heavy material. Carbon fiber is a lighter material and gives a rider improved performance. In addition, the number of fiber layers bonded together can make this material just as strong as using steel. However, these advantages come with a price. Carbon fiber is a material that must be layered and bonded together. This process takes time to fulfill, which increases labor hours. This cost driver is higher as compared to using other materials. Therefore, while weight and performance are advantages, customers will pay more if they choose this material.

The most popular material requested by customers to use in custom frames built at Sprockets is titanium. This material is as strong as steel and weighs less, but it is heavier than carbon fiber. Titanium can flex, which allows it to keep its shape, especially on more rugged terrains. This material is more expensive than steel and aluminum, ranging in price between \$2,500 and \$4,000. Several factors impact the range in price. One of those factors is that every rider has a different body type. Some riders have longer legs or torsos than others which will cause more material to be used while building the frame. In addition, bicycle frames can be built in different styles, which changes their geometry. Depending on the style selected, more or less material will be needed, leading to adjustments in the price. Labor hours will also increase because welding titanium takes several steps, unlike steel.

Once the customer has picked out a frame and reviewed the order, a contract is signed, and a deposit is made. The timeframe to build the bike will vary depending on the availability of supplies and materials, but on average, it can be between 2 to 4 months. After the bicycle is built, it can be picked up for those that live in or near South Florida. For online purchases, each bicycle ships in the same manner as off-the-rack bikes. The bicycle will be 95% assembled when sent, requiring the remaining 5% to be completed by the customer. If the bike were to fail due to manufacturing defects by Sprockets in 3 years, it would be repaired free of charge or replaced.

## **CYCLING SOARS**

2020 was a year that changed people's lives in the U.S. and throughout the world due to the coronavirus pandemic. In January, to help reduce the spread of the virus, many safety precautions, including social distancing, wearing face coverings, and stay-at-home orders for non-essential businesses were put in place. As a result, bicycle shops were closed. However, bicycle shops were deemed essential businesses by March because biking was an activity where

people could remain practicing social distancing. In addition, side effects caused by quarantining, such as stress, anxiety, and depression, could be relieved by riding a bike. As a result, the U.S. biking industry increased sales by \$2.2 billion between Q1 2020 and Q1 2021, a growth of roughly 35% in one year (Richter, 2021). Furthermore, the global market has gained significant growth in this period, and it is expected that by 2030 sales will reach \$82 billion (Transparency Market Research, 2020). Drivers influencing the global market include increased fuel prices, countries trying to reduce their carbon footprint, countries attempting to reduce obesity, growth in popularity of cycling events, and technological advancements (Transparency Market Research, 2020).

Sprockets, considered an essential business due to the change in the stay-at-home order, has been performing well but is extremely busy. Mr. Roberts expects that by the end of 2021, Sprockets will have approximately increased sales by 50%, reaching \$1.5 million. Along with the increase in sales, several new challenges that Mike Roberts never thought he would experience were presented. Mr. Roberts has needed to hire three new bike technicians, increasing staff from five to eight. Receiving supplies from vendors has been very difficult and, in some cases, takes up to 8 to 12 weeks to arrive. Vendors in countries such as China provide many supplies. The problem is the ability to get these products on shipping barges caused by the strain in the supply chain. An increase of online shoppers during the pandemic triggered the strain by increasing global shipping volume. This issue is frustrating for Mr. Roberts because a bike can be 90% complete, but if there is a delay in one or two parts, he or his staff will need to put the assembly aside and begin another order. This problem slows the shop in receiving payment and can impact the bicycle delivery to the customer, causing them to be upset. Mr. Roberts knows that he is not the only bicycle shop in South Florida facing challenges and decides to examine the competitive pressures in the market.

## MARKET ANALYSIS

To diagnose competitive market pressures in South Florida bike shops, Mike asks his son which tool is best to use. His son tells him to utilize the five forces framework. As indicated in figure 3 (Appendix), the five forces framework examines sources that create competitive pressures on companies in a market. Mike learns that threat of new entrants is strong due to low cost and low barriers to entry. While Sprockets has been in business for more than two decades, a new bike shop can open quickly, selling and building bike products. Given the current high demand of customers for bicycles, the bargaining power of buyers is weak because they have less of an ability to negotiate prices. If a customer tries to go to another shop, chances are the price and wait time will be roughly the same. The threat of substitute products in the market becomes an immediate concern for Mr. Roberts because this source is strong. In-home cycling equipment such as Peloton and Echelon have become popular. Although this cycling equipment is set up indoors, it provides individuals the ability to exercise, similar to the benefits offered by an outdoor bicycle. The increase in E-Bikes sales is another substitute, which is expected to rise annually over the next ten years.

Mr. Roberts has already experienced the effects of vendors being unable to ship supplies to the shop. Currently, there is high demand for products but a low supply in the market, which is a competitive pressure that indicates the bargaining power of suppliers is strong. Suppliers can adjust prices because of the limited supply in the market, which will lead to increased costs for bicycle shops and ultimately customers paying more for products. Rivalry among existing

competitors is the final competitive market pressure source, which is weak. The bicycle market has grown rapidly over twelve months due to the pandemic. Bicycle shops in the South Florida market are performing well and earning higher revenue than in prior years. In addition, exit barriers are low to leave the market. If a bicycle shop owner decides to close the business, assets can be sold off quickly or transition to be used for other purposes.

## COMPETITIVE STRATEGY

After reviewing the five forces framework, Mr. Roberts decides to review different strategies to be competitive in the bicycle market in South Florida. There are five different competitive strategies that Sprockets Bike Shop should consider. A low-cost strategy is when a business offers lower prices that other companies cannot meet or exceed. In addition, products are comparable and attract a broad spectrum of buyers. Mike believes he may be in this category given the lower markup price he can provide to many customers, but he decides to review alternative competitive strategies available. A company seeking to differentiate product offerings from competitors that appeal to a broad spectrum of buyers is differentiation. Businesses with this strategy can charge higher prices for their products. As a result, there is a larger profit margin, and this is due to the loyalty of customers who cannot get their needs met from other available products or companies in the market. Another competitive strategy, focused low-cost, seeks to offer lower prices to a particular market segment rather than trying to capture the whole market. This strategy focuses on certain aspects of a customer, such as age, gender, economic bracket, interests, or geographic location.

At this point, Mr. Roberts still believes Sprockets is more aligned to a low-cost strategy but continues to review the remaining competitive strategies. The next strategy is focused differentiation, which seeks to offer different product or service features to a particular segment of the market rather than appeal to the entire marketplace. Sprockets, being in business for 25 years, and building handmade bicycles that appeal to enthusiast customers seeking high-quality road and mountain bikes has characteristics that align with this competitive strategy. However, there are a small number of other bicycles shops in the South Florida bicycle market that build custom bikes. The difference is that they have not been in business as long as Sprockets, and the level of quality is not to the same standard. The final competitive strategy is a hybrid called best-cost. This strategy seeks to incorporate upscale product attributes at a lower cost than rivals. Best-cost exceeds the expectations of customers in both cost and features.

## THE DISCUSSION

Mr. Roberts, having examined the bicycle industry, his business Sprockets, the change in the market due to the pandemic, competitive market pressures, and competitive strategies, has created a list of questions. He feels that the answers generated will better support him in the decisions he needs to make for his business to continue to be successful for another 25 years. Those questions are as follows:

- 1) How does Sprockets Bike Shop use product differentiation to increase profitability and manage competitive rivals in the South Florida market?
- 2) How will substitutes, such as E-Bikes in the market, affect Sprocket's competitive strategy?

- 3) What effect do external forces have on Sprocket's ability to gain or maintain its position in the market?
- 4) Should Sprockets invest and focus more on selling products through e-commerce? If so, Why?
- 5) Explain the competitive advantage of Sprockets Bike Shop and how it could be beaten by other shops in the market?





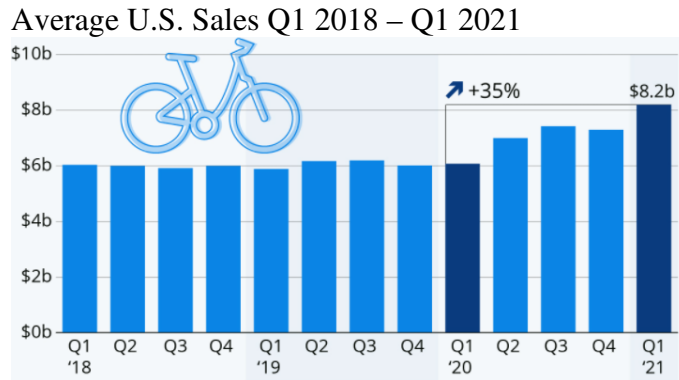
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**APPENDIX**

Figure 1



Note. The graph shows the average sales of bicycles in the U.S. from Q1 2018 – Q1 2021. From *Pandemic-Fueled Bicycle Boom Coasts Into 2021*, by Statista, 2021. (<https://www.statista.com/chart/25088/us-consumer-spending-on-bicycles/>).

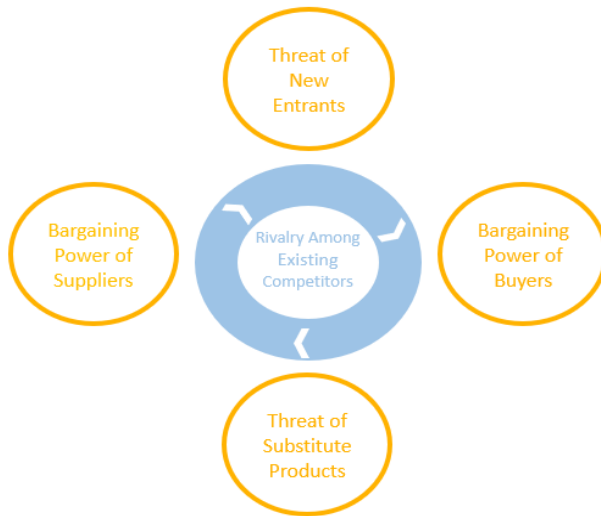
Figure 2

Comparison of Materials Used in the Construction of Bicycle Frames

Frame Material Comparison				
Material	Cost	Weight (lbs.)	Advantages	Disadvantages
Steel	\$1,200 - \$3,000	3.25	<ul style="list-style-type: none"> <li>- Most economical and inexpensive</li> <li>- Easiest to weld, reducing labor time</li> <li>- Very strong</li> </ul>	<ul style="list-style-type: none"> <li>- Heaviest of all materials</li> <li>- The frame will rust overtime if it gets wet or is left outside in the rain</li> </ul>
Aluminum	\$2,000 - \$3,000	3	<ul style="list-style-type: none"> <li>- Slightly more expensive to steel but less than titanium and carbon fiber</li> <li>- Durable strength</li> <li>- Lighter than steel</li> </ul>	<ul style="list-style-type: none"> <li>- Delicacy is required when welding</li> <li>- Heated too long, the material will crack</li> <li>- Long labor hours</li> <li>- Frequent stress absorbed on the frame will cause cracking overtime</li> </ul>
Titanium	\$2,500 - \$4,000	2.5	<ul style="list-style-type: none"> <li>- Is as strong as steel but much lighter</li> <li>- Can flex, allowing it to keep its shape</li> </ul>	<ul style="list-style-type: none"> <li>- Difficult to machine</li> <li>- Multiple steps are required when welding</li> <li>- Long labor hours</li> </ul>
Carbon Fiber	\$3,500 - \$5,000	2	<ul style="list-style-type: none"> <li>- Very strong and durable</li> <li>- Increase in riding performance</li> <li>- Lightest of all materials</li> </ul>	<ul style="list-style-type: none"> <li>- Most expensive</li> <li>- Most labor intensive</li> </ul>

Figure 3

5 Forces Framework of Bicycle Market



1 Threat of New Entrants

*High*

- Low barriers to enter market and entry costs are low
- Current shops in the market are unlikely to retaliate against new entrants

2 Bargaining Power of Buyers

*Low*

- Given the current high demand of bicycles, buyers have less of an ability to negotiate price

3 Threat of Substitute Products

*High*

- In home cycling equipment (ex. Pelton, Echelon)
- Rise in sales of electric bicycles

4 Bargaining Power of Suppliers

*High*

- High demand and low supply of products gives suppliers the ability to adjust prices

5 Rivalry Among Existing Competitors

*Low*

- Industry has rapidly grown due to pandemic, all bicycle shops are earning revenue
- Products are differentiated
- Brand loyalty is significant for certain customers (ex. Enthusiasts)
- Exit barriers are low to leave market

