SCHOOL OF BUSINESS AND ECONOMICS

HARVEY F. SEEGERS

Masters Specialty Bicycle Company

Bill and Karen Masters are the owners and managers of their own specialty bicycle company, appropriately named after the family. Married soon after finishing a well-known graduate *business analysis* program in Washington, D.C. a few years ago, both of these young entrepreneurs are avid cyclists, and compete regularly in local amateur races. In college, Bill majored in Design Engineering and Karen received honors in Behavioral Psychology. They attended graduate school in business analysis to obtain the practical knowledge, skills, values, and experience in *structured business thinking* they would need to start and operate their own specialty bicycle business. In their bicycle shop in Great Falls, Virginia, tacked prominently on the bulletin board above their shared office desk, is this excerpt from an article published by a leading bicycling industry magazine:

Look closely at yourself before taking on the difficult task of starting a bicycle business. Enthusiasm is important, but it is not enough. Make sure you can muster excitement and creativity for marketing, accounting, statistics, inventory control, advertising, employee relations, and sweeping the floor. You must want to serve people of all ages, types, colors, and creeds. You'll need some mechanical inclination and a strong constitution - not flinching from long hours, hard work, and setbacks.

Use all the resources you can find to learn about business basics. "Seat of your pants" business management can get you into a lot of trouble. Above all else, take your time to do your research and build a sound business plan. Ethics, planning, organizational skills, and high energy are prerequisites for success in the bicycle business.

Customer service affects almost every decision by a bicycle dealer. Each time a customer steps into your store, he or she is judging the experience. You and your store are performing and the showroom is the stage. Customers don't like to be ignored, bored, or manipulated. Attention to detail, good selection, knowledge, a caring attitude, ethical behavior, and good product presentations - these are all the keys to giving the customer that good experience.

Profits are not, by themselves, the only purpose of a bicycling business. But, outstanding customer service depends upon profitable operations. Profits do not happen by accident. Profits occur by creating superb customer value, which customers will reward with price premiums and shop loyalty - and by running the business productively, which means managing operating expenses and investment capital efficiently. The most successful bicycle dealers in the country live and breathe by these business principles every day. You should as well.

Bill and Karen Masters often reflect upon this advice, and they take pride in their showroom, customer service, and cost efficiency. Over the years they have learned that intuition and common sense are important ingredients of management judgment. However, they both also have learned to use data and quantitative analysis to solve problems and make the most important decisions in their business.

Not surprisingly, therefore, the Masters run their business "by the numbers" as the saying goes. Having learned the fundamentals of accrual accounting, cash flow, and financial analysis in graduate school, they "keep the books" meticulously for operational control. **Exhibits (A1, A2, A3)** contain nine years of the financial and operating metrics for the business from startup (2009) through forecast (2017). **Exhibit (A4)** contains selected operating metrics by month for 2010 through 2013.

Looking back on the first five years of the business (2010-2014E), they are satisfied with the results, but feel that there is much more they could be doing. Their financial plan for the next three years (2015-2017) calls for exceeding the one million dollar mark in sales and delivering 5-10% growth rates. On one particular Monday afternoon (when the shop is closed), Karen and Bill sat down behind their office desk to read two **documents**: (1) a current Bicycle Industry Research Paper and (2) the original Executive Summary of their Business Plan composed when they first started their business. They wondered what, if anything, they needed to do differently going forward to meet their ambitious growth and profitability targets.

Document OneRESEARCH: U.S. BICYCLE INDUSTRY 2014

Industry Overview

Cycling is the seventh most popular recreational activity in the United States, behind exercise walking, swimming, camping, fishing, exercising with equipment, and bowling. The <u>Bicycle Market Research Institute</u> estimates that 73% of adult cyclists ride for recreation, 54% for fitness, 10% for commuting, 8% for racing, and 6% for sport. (The figures add to more than 100% because some cyclists ride in multiple ways.) According to the <u>National Sporting Goods Association</u>, 35 million Americans aged seven and older rode a bicycle six times or more in 2013. In 2012, this number was 39 million and, in the peak year of 1995, it was 59 million. **Exhibit (B)** compares bicycle-riding participants in the U.S. between the years 2000 and 2010.

Bicycles with wheels 20 inches in diameter or larger (the "mass market") basically come in two varieties: standard and specialty. Standard bicycles are mass-produced, single-purpose (on paved roads for recreational use), and sold in high volume "big box" national retail stores (e.g., Wal-Mart, Target, Sears, etc.). Specialty bicycles are designed for special purposes, such as mountain biking on dirt trails, long haul cross-country trips on paved roadway, or comfortable local recreation riding. There are over 150 different bicycle brands sold in the United States. The

most popular "standard bicycle" brands are: Schwinn, Mongoose, Roadmaster, Magna, Royce Union, Rand, and Kent. The most popular "specialty bicycle" brands are Trek, Giant, Specialized, Redline, Raleigh America, Haro, and Electra.

There is little brand crossover in the U.S. bicycle market – meaning the "standard" brands do not make or sell "specialty" bicycles, and vice versa. The only exception to this behavior is Schwinn, who has begun selling both "standard" and "specialty" models. In general, a "standard" bicycle is a normal performance ride and is affordably priced. A "specialty" bicycle, on the other hand, is a high performance ride and priced much higher.

Specialty Bicycle Demand

The U.S. market for Specialty Bicycles is profiled in **Exhibit (C)**. About 2.4 million specialty bikes were sold in 2013. But, as depicted in the Exhibit, the specialty bicycle market share by category differs substantially.

Mountain Bikes and *Hybrid Bikes* constitute roughly half of the U.S. specialty bicycle market. Mountain bicycles are designed for riding rough off-road trails. They have flat or upright handlebars, and a very low gear range for pedaling up steep hills. Most have some type of shock absorbers. Hybrid bicycles were originally conceived to provide the advantages of both road bikes and mountain bikes. Their large, padded saddles and upright handlebars provide a comfortable riding position. They are best for casual riding around the neighborhood on (paved or unpaved) bike paths, short-distance commuting, and errands around town. They can be ridden on paved roads, but are not as efficient or lightweight as a road bicycle.

Road bikes are the third most popular category of specialty bicycle. They are designed to be ridden fast on smooth pavement. They have smooth, skinny tires and "drop handlebars" and can be used for paved road racing. They are usually lighter than most other bicycle types and most people find them unstable on unpaved trails.

As the name implies, *Comfort bikes* – the fourth most popular category -- are comfortable transport vehicles with a laid-back riding position and plush suspension. Foam saddles on springs and high air volume tires combine to take the sting out of street bumps and other roadway imperfections.

Youth bikes have ultra-lightweight frames, handlebar braking, and 3-speed gearing. These relatively simple bikes are designed for either on-road or off-rode travel, and for simple stunts, such as "wheelies" that entertain the younger riders.

Cruiser bikes are similar to hybrid bikes in that they are designed for casual riding, and have a very comfortable, upright riding position and a large comfortable saddle. Cruisers usually have wide "balloon" tires and handlebars that are more upright and "swept back" than hybrids. Most also are single speed with the old-fashioned coaster brake (where you pedal backwards to stop). They are best for

short-distance commuting and neighborhood errands, as long as the route is fairly flat.

The final three categories of specialty bicycle, *recumbent*, *electric*, and *folding*, are niche market segments with uncertain futures.

Specialty Bicycle Supply

The U.S. specialty bicycle market is dominated by imports. The <u>National Bicycle Dealers Association</u> estimates that 99% of specialty bicycles are manufactured in China or Taiwan and imported into the United States. Even where there is a U.S. company assembling specialty bicycles from components (such as drivetrains, derailleurs, brakes, bars, saddles, etc.), those components are manufactured in the Far East. As a consequence, U.S. bicycle dealers and cycling enthusiasts are heavily dependent on global free trade and favorable exchange rates. Trade sanctions or a weak dollar could pose serious problems for the supply or affordability of bicycles in the U.S.

Manufacturing bicycles is a labor-intensive business because most of the bicycle is assembled by hand. In order to keep costs low, Chinese manufacturers employ minimally skilled workers at extremely modest wage rates. As a consequence, U.S. distributors must be constantly vigilant about working conditions in their suppliers' factories.

Bicycle Distribution

Bicycle sales are accomplished in the U.S. through five primary and distinct channels of distribution: mass merchants, specialty bicycle retailers, full-line sporting goods stores, outdoor specialty stores, and online direct over the Internet. Average bicycle prices vary considerably by channel. **See Exhibit (D)**.

Mass merchants (department, discount, chain toy stores) sell standard price-oriented products. In 2013, approximately 74% of all U.S. bicycle unit sales (all sizes and types) were through this distribution channel. However, these unit sales only represented 30% of the dollar sales, at an average price per bicycle of \$84.00. The "Big Five" mass merchants – Wal-Mart, Toys "R" Us, K-Mart, Target, and Sears Roebuck -- sold 60% of all the bicycles in this distribution channel in 2013.

The approximately 4,000 specialty bicycle retailers in the U.S. in 2013 commanded approximately 15% of all bicycle unit sales, but 52% of the dollar sales. Dealer price points generally start at around \$200.00, with an average of \$714.00, but with some bicycles priced into the thousands of dollars on the high end. While the number of specialty bicycle stores has declined in recent years due to consolidation, they are responsible for approximately the same amount of business. Or otherwise stated, the selling space lost due to consolidation has been replaced by expansion in the remaining stores. This channel's overall market share was flat in 2013 when compared against 2012, although the average selling price rose.

Chain sporting goods stores sold about 6.5% of the bicycles and 8 % of the dollars in 2013, with an average selling price of \$254.00. These merchants include: The Sports Authority, Champs Sports, JumboSports, and Sportmart.

Outdoor specialty retailers sold 2.5% of the bicycles and 6% of the dollars in 2013, with an average retail-selling price of \$577.

About 2% of bicycles were sold over the Internet in 2013, with an average retail-selling price of \$345. There is fierce debate in the bicycle industry over how important, or how threatening, this new online channel will be in the future.

Specialty Bicycle Dealers

According to the <u>National Bicycle Dealers Association</u> (2011), the average specialty bicycle retailer had gross annual sales of \$886,817 – up from an average of \$550,000 in 2005. The typical average specialty retailer did business from a store of about 5,000 square feet in size. The average specialty bike shop sells 650 bicycles per year, carries 5 different bicycle brands, and many more bicycling accessory brands (helmets, biking apparel, etc.).

New bicycle sales represent 47% of total revenue for the average specialty bicycle shop. Parts, accessories, rentals, and service/repair comprise the rest. Specialty bicycle shops feature quality merchandise and add value through services such as bike fitting, assembly, repair, and community involvement.

The gross margin (price minus variable costs) on specialty bicycles averages 36%. The variable cost is the price the bike shop pays to its supplier. So, if a Bicycle Company buys a bike from one of its Chinese suppliers for \$200.00 (a "cost" to the Company), and then sells it to a customer for \$312.50, the gross margin is \$112.50 (\$312.50-\$200.00=\$112.50). When expressed as a percentage of price, the gross margin dollars (\$112.50) are divided into the purchase price (\$312.50). Here \$112.50/\$312.50 = 36%. The reason the \$200.00 cost is called "variable" is because it varies with the volume of bikes sold. If the Company buy 5 bikes @ \$200.00 each, the variable cost would be \$1,000.00.

Conversely, there are "fixed costs" associated with running a specialty bicycle business. These costs are incurred regardless of how many bicycles (or anything else) are sold in the shop. The biggest single "fixed cost" in the specialty bicycle business is payroll expense, which amounts to 20.5% of sales. Payroll expenses include owner salary, as well as the wages of store employees. These costs must be paid independently of how many bicycles (or anything else) are sold, hence the term "fixed costs."

The other components of "fixed costs" in the typical specialty bicycle business are:

- Occupancy (rent, utilities) = 7.7% of sales
- Advertising = 3.0% of sales
- Store supplies/postage = 1.2% of sales
- Depreciation (lost value of owned equipment) = 0.9%
- Insurance = 0.8%
- Telephone = 0.6%
- Automobile/Delivery = 0.5%
- Professional Services (lawyers, accountants, etc.) = 0.5%
- Licenses and Taxes = 0.5%
- Travel and Entertainment = 0.4%
- All Other = 1.3%

-

Therefore, the total "fixed costs" in the typical specialty bicycle company are 37.9% of sales. In order to determine a company's profit before paying interest and taxes, a business subtracts its "fixed costs" from its "gross margin". In the specialty bicycle business, the average gross margin on a specialty bicycle is 36% of sales, and the average fixed costs are 37.9% of sales. When you do the math (36.0% - 37.9%) you find that the average specialty bicycle company makes no profit at all from bicycle sales – in fact, it loses money on bicycles!

Why would anyone run a business that loses money on its showcase product?

Part of the answer lies in the retail-marketing concept of *merchandise mix*. Specialty bicycle companies carry many bicycling accessories that have much higher gross margins than bicycles. These include helmets, handlebar horns, rearview mirrors, saddle cushions, racing attire, sunglasses, and the like. Interestingly enough, the typical specialty biker will spend weeks researching the prices of bicycles before deciding to buy. But, once that customer is inside the bike shop ready to buy the bike of his or her dreams, that customer buys accessories with little or no concern for their price. In the world of marketing, this behavior is called "planned purchasing" (the bicycle) and "impulse purchasing" (the accessories). Ironically, a specialty bicycle shop makes no money from planned purchasing, but relies almost exclusively on impulse purchasing to make a profit.

Another part of the answer lies in the difference between the profitability of products versus parts and services. In general, parts and services command higher gross margin percentages than products. In the bicycle business, this means repairing a broken specialty bicycle is a more profitable business than selling the new bicycle. Cycling enthusiasts have an emotional attachment to their specialty bicycles, and when the bicycle "hurts" the owner wants it "fixed" by a reputable dealer. Much like an impulse purchase, the customer needing parts and repair services is going to be more sensitive to the quality of the bike shop than the price of the parts and service.

This leads to the essence of the specialty bicycle business: personal service. Bicycling enthusiasts are demanding customers, and they choose their dealers based upon the overall experience in the bike shop. Therefore, product presentation, employee attitude, and service quality are key success factors in this business.

Document TwoBUSINESS PLAN: MASTERS SPECIALTY BICYCLE COMPANY, LLC

1.0 EXECUTIVE SUMMARY

1.1 COMPANY AND INDUSTRY

Masters Specialty Bicycle Company is a specialty retail bike company headquartered in its store located in Great Falls, Virginia – a town known for its great bicycling paths. The company store operates under lease in a 5,000 square foot building in a prime shopping center location. The specialty bicycling industry nationwide is flat to slightly down, but in Northern Virginia it has been vibrant.

1.2 PRODUCTS AND SERVICES

The store sells all types of specialty bikes with an emphasis on mountain bikes, hybrids, road bikes, comfort bikes, and cruisers. In addition to bike sales, the shop offers configuration and repair services, accessories, and parts, which are installed by certified mechanics. Accessories include helmets, goggles, shoes, cycling apparel and the like. While special-purpose bicycles are the primary product for the company, profitable operations depend upon the sale of the higher margin services, accessories, and parts. Buyers tend to revisit the dealer who sold them their specialty bike, so strong bike sales are essential to "pull-through" sales of parts, services, and accessories.

1.3 MARKET AND COMPETITOR ANALYSIS

Research from the Virginia Department of Transportation, the National Bicycle Association, and numerous Virginia Bike Clubs, paints a fairly complete picture of the bicycle market in Virginia. Virginia is home to 838 miles of biking trails, more than any other state. Bikers think of trails in 4 ways: (1) on-road paved, (2) off-road paved, (3) off-road unpaved, and (4) mountain. Northern Virginia has the most extensive biking trails in the state, and one of the most popular trails is the 125-mile off-road unpaved towpath along the C&O canal. The most common entry point to the towpath trail is at the National Park in Great Falls, Virginia, about three miles from the store. The park receives over 500,000 visitors annually.

Masters is the only specialty bicycle company with a store in Great Falls; however, several "big box" retailers (e.g., Wal-Mart, Target, Sears) are only miles away. To date, these big retailers have only sold standard, mass-produced bikes, at cheap prices and do not offer services or parts. Also, Masters has an exclusive

distribution agreement with 3 big specialty bike manufacturers for a 15-mile radius around its Great Falls store.

1.4 STRATEGY AND IMPLEMENTATION

Exhibit (E) profiles the demographics of the participants in the bicycle industry, or, otherwise stated – the characteristics of bicycle customers.

Masters' target customers are frequent adult bicyclists who ride at least 110 days a year. Within this category, the company markets to men and women aged 25 to 44 with average household incomes of \$50,000 - \$100,000 a year. These customers demand knowledgeable salespeople, excellent product selections, friendly store atmosphere, and quality service. Our success depends upon gaining a reputation for providing a memorable customer experience every time a cyclist enters our store. Therefore, we will invest in our employees and pay above-market wage rates to attract and retain the best-suited people for this business model.

1.5 MANAGEMENT

Karen and Bill Masters manage the business, and are the company's sole owners and founders. They both have 15+ years of specialty bicycle riding experience, college degrees, and graduate business education. The company will employ full-time certified mechanics on staff and full-time salespersons.

1.6 FINANCIAL PLAN

Masters projects sales in Year 1 of \$200,000 and sales growth of 40-50% each year thereafter through Year 5. The company will become operating cash flow positive by Year 2. Bicycles will account for 40% of annual sales; parts, services, accessories, and equipment will account for other 60%.

1.7 KEY ASSETS

Masters will maintain top-of-the-line inventory of specialty bikes, parts, and accessories. Other assets include tools, cash register, computer, retail displays, and signage. Intangibles, such as management experience, relationships, and location will also be important assets for the business.

Framing the Issues

After some discussion with her husband over the Industry Research Paper, Business Plan Executive Summary, and their ambitious goals for growing the business in the next three years, Karen stepped up to a whiteboard in the office and drew an isosceles triangle. Inside the top angle she wrote "enhance" – inside the

bottom left angle she wrote "expand" – inside the bottom right angle she wrote "extend" – and in the middle of the triangle she wrote "ethics." **See Exhibit (F).**

Bill looked at the diagram and asked Karen what it meant.

"Remember that business analysis course about how successful business leaders synthesize, communicate, and execute?" she replied. "Of course I do," Bill rejoined, "that's the one where we studied the leadership behaviors of great Chief Executive Officers like Steve Jobs and Meg Whitman." "Exactly," Karen pointed out, "and we need to start thinking like those leaders too." "What exactly are you suggesting?" Bill said with a quizzical look on his face. "We should structure our thinking about growing the business around these four ideas: *enhance* our core business, *expand* our products and services, *extend* our customer reach, and center everything we do around our personal and professional *ethics*," Karen declared. ""It is simple, understandable, and actionable."

"I like that a lot," Bill replied, "now we should compile a list of issues that correspond to each of those ideas." Over the next two hours they developed an extensive list of questions, problems, and decisions that needed to be addressed. Here is their list:

I. Enhance

- <u>A. Market Selection</u>. Men buy more specialty bikes from us than women. What should we do to increase the number of women who buy from us?
- <u>B. Product Policy</u>. Are we selling the right mixture of bikes, parts, accessories, and service? Are we over-emphasizing one category of bikes to the detriment of other? Should we continue sourcing all of our bikes from China? Since our business is seasonal, should we draw down our inventory in the slow months?
- <u>C. Price Policy</u>. Are we pricing our specialty bicycles correctly? They are the lowest profit margins in the business, but does it have to be that way? Is there room for us to raise prices? Or, maybe we should lower them and sell more bikes?
- <u>D. Place Policy</u>. Are we in the right location to attract the most customers? We are closed on Mondays and Tuesday, but should we be open instead? Are our store hours, 9am to 5 pm, appropriate? How should we conduct our research to gather the data to answer these questions?
- <u>E. Promotion Policy</u>. Is our brand identity optimal? Should we change our name to something more action-oriented? (More on this in Section IV on Ethics.)

II. Expand

- <u>A. Market Selection</u>. We have consciously targeted adult frequent bikers as our primary customers. But should we expand our horizons into specialty *Youth* bikes as well? Are there other segments of the specialty bicycle market we should be serving? Are we defining our "target customer" too broadly or too narrowly? We have finite resources and cannot be "all things to all people" but where is our "sweet spot" of customers?
- <u>B. Product Policy</u>. Should we also rent bikes out of our shop? Or, how about the company acting as a used bike broker (buying old bikes, fixing them up, and reselling them)? Where can we find research about the bike rental market?
- <u>C. Price Policy</u>. We determine our bicycle selling prices by "marking up" their cost to us from the supplier by 60% (e.g., buy a bike for \$300 and sell it in the showroom for \$480). Is there a better way to determine selling prices? Also, we never run discounts or offer rebates. Should this change?
- <u>D. Place Policy</u>. We devote 12 square feet (6' x 2') of showroom floor space for every bicycle. Is this too little or too much? The ceilings in the show room are 15 feet high. Should we invest in vertical bicycle racks and stack a second row on top of the bikes on the showroom floor?
- <u>E. Promotion Policy</u>. Are we communicating effectively to our customers? We have been relying on word of mouth to get our store recognized, but maybe now it is time to use newspapers, magazines, radio, TV, or the Internet to cast a wider message? How do we decide which media to use?

III. Extend

- <u>A. Market Selection</u>. Should we be planning to open another store soon? Annapolis, Maryland is a popular specialty biking territory as is the Eastern Shore of Maryland. Starbucks Coffee Houses are on virtually every urban street corner, why shouldn't we extend into new bicycle markets?
- <u>B. Product Policy</u>. Should our service business include bike repair at home? Or, should we begin offering high-energy drinks for sale? How about fitness equipment? What other products make sense for a specialty bike shop to sell that we are missing? Is there research on what the typical bike shop sells besides bicycles?
- <u>C. Price Policy</u>. Should we offer "volume discounts" to our customers (e.g., 10% off a \$500 purchase; 15% off a \$750 purchase; 20% off a \$1000 purchase)?

- Should we pay our salespeople a "commission" on their sales (e.g., 5% of the total sale price)?
- <u>D. Place Policy</u>. There is vacant office space next door to our shop with 3,000 square feet of flooring. Should we lease that space and extend our showroom?
- <u>E. Promotion Policy</u>. What kinds of community activities should we participate in to demonstrate our commitment to the sport and the people?

IV. Ethics

- A. Profit Maximization. We have always believed that we should run our business for the common good of our customers, suppliers, employees, investors, and community. This means that we do not seek to squeeze every penny of profit out of our business. Some of our cycling buddies call this lazy management. A few people we approached for start-up money said "no" because we were not profit-maximizing animals. Is our mindset too idealistic? Do we need to get more aggressive in managing the business for profit?
- <u>B. Equitable Compensation</u>. Both of our certified mechanical technicians do the same work for us. One, however, supports a large family with some health issues. The other is a young bachelor who lives with three unrelated roommates in a small apartment. Should we take their personal circumstances into account in determining what we pay them?
- <u>C. Working Conditions</u>. One of our largest suppliers in China employs children as young as 10 years old to perform manual labor. They work 12-hour days and 6 days a week. They barely get paid subsistence wages. However, many of these children are the only person in the family who makes money. Should we stop doing business with this supplier?
- D. Marketing Integrity. An advertising agency we have been seeing is recommending that we change our brand image from "high-performance biking" to "swinging-singles recreation." They want us to incorporate sexually suggestive images in a media campaign, such as scantily clad women riding alongside shirtless men sporting 6-pack abs. Are there moral limits to this sort of innuendo in marketing imagery?
- E. Religious Accommodation. Weekends are our busiest selling days. We need to be open most of the daylight hours. We have a mixture of religious faiths represented in our employee population. A number of them have requested "time-off" on Saturday or Sunday to attend worship services. Do we have a moral obligation to give them that time? Would it be immoral to only hire people who need no such special accommodation?

Business Analysis

After hours of brainstorming the long list of issues facing the business as it enters a new stage of growth, Bill and Karen felt a bit overwhelmed. "And I thought we were doing a pretty good job," lamented Karen. Bill was a bit more sanguine. "We have been doing well," he observed, "but this is all about doing even better."

"How in the world are we going to find the time and energy to do all this business analysis and still manage day-to-day operations?" asked Karen. Bill was silent for over a minute. Then almost simultaneously the couple shouted out: "interns!"

Back at home that evening, Bill logged on to his computer and typed the following e-mail:

Dear Sir:

We are the co-owners of a specialty bicycle company located in Great Falls, Virginia. We are also graduates of your Master of Science in Business Analysis Program. Do you have any students who might be interested in joining us as interns and helping us solve problems essential to our company's future growth?

Here are the characteristics we are looking for in our interns:

- Smart, energetic, enthusiastic graduate business students willing to learn the specialty bicycle business fast and thoroughly.
- Structured thinkers who can: (1) prioritize issues in order of importance to the business; (2) organize data in a manner to logically represent the underlying problem or opportunity needing a solution; (3) conduct research as necessary to complement the data on hand in the business; (4) employ the correct analytical tools for deriving a solution; and (5) communicate the analysis and solution to management in a clear, crisp, and concise manner.
- Character and values beyond reproach. Care genuinely about others. People who
 overcome obstacles and take personal satisfaction in a job well done.

Sincerely,

Bill and Karen Masters

After sending the e-mail, Bill and Karen spoke about how much they hoped that the school would receive their request for interns favorably.

The next morning the phone rang, Karen answered, and the voice on the other end asked, "How soon would you like your interns to start?"

Exhibit (A1)

Financial Sta	itements (200	9 - 2016F)																					
				start	-up year	<		р	ast actuals	;			>	cu	rrent year	<		-for	ecast		>	CAGR	CAGR
					2009		2010		2011		2012		2013		2014E		2015F		2016F		2017F	(2010-2014E)	(2014E-2017
Income Stat	ement (\$000)																						
																				L.			
	Sales			\$	-	\$	201.63	\$	333.85	\$	501.78	\$	652.78	\$	817.48	\$	947.25		1,054.75		1,206.25	42%	
	Cost of Sales			\$	-	\$	(110.65)	\$	(175.89)	\$	(255.29)	\$	(326.99)	\$	(400.79)		(461.61)	\$	(516.16)			38%	9.09
	Gross Margin			\$	-	\$	90.98	\$	157.96	\$	246.49	\$	325.78	\$	416.68	\$	485.64	\$	538.59	\$		46%	7.89
	Operating Ex			\$	-	\$	(102.80)	\$	(125.80)	\$	(175.80)	\$	(254.90)		(318.90)		(358.40)	\$	(420.00)			33%	
	Operating M			\$	-	\$	(11.83)	\$	32.16	\$	70.69	\$	70.88	\$	97.78	\$	127.24	\$	118.59	\$		nmf	12.19
	Interest Expe	ense		\$	-	\$	(3.75)	\$	(3.75)		(3.75)	\$	(3.50)		(3.00)		(2.00)		(1.50)	-	(1.00)	-5%	-20.69
	Taxes			\$	-	\$		\$	-	\$	(22.09)	\$	(22.24)		(31.28)		(41.33)		(38.64)				12.59
	Net Income			\$	-	\$	(15.58)	\$	28.41	\$	44.85	\$	45.15	\$	63.50	\$	83.91	\$	78.45	\$	119.35		12.59
Balance She	et (\$000)																						
	Assets																						
		Cash		\$	85.00	\$	49.43	\$	39.83	\$	46.68	\$	50.83	\$	75.33	\$	120.24	\$	149.69	\$		11%	
		Accounts re	ceivable	\$	5.00	\$	20.00	\$	33.00	\$	46.00	\$	59.00	\$	69.00	\$	79.00	\$	89.00	\$		36%	7.89
		Inventories		\$	40.00	\$	40.00	\$	60.00	\$	85.00	\$	110.00	\$	135.00	\$	160.00	\$	185.00	\$		36%	
		Plant and Ed	quipment (net)	\$	50.00	\$	65.00	\$	80.00	\$	85.00	\$	90.00	\$	95.00	\$	100.00	\$	105.00	\$		10%	3.29
		Total		\$	180.00	\$	174.43	\$	212.83	\$	262.68	\$	309.83	\$	374.33	\$	459.24	\$	528.69	\$	639.04	21%	11.69
	Liabilities																						
		Current liab	ilities	\$	5.00	\$	10.00	\$	15.00	\$	20.00	\$	27.00	\$	33.00	\$	39.00	\$	45.00	\$	51.00	35%	9.49
		Non-current	t liabilities	\$	75.00	\$	75.00	\$	75.00	\$	70.00	\$	60.00	\$	50.00	\$	40.00	\$	20.00	\$		-10%	-100.09
		Total liabilit	ies	\$	80.00	\$	85.00	\$	90.00	\$	90.00	\$	87.00	\$	83.00	\$	79.00	\$	65.00	\$	51.00	-1%	-13.69
		Shareowner	Equity	\$	100.00	\$	89.43	\$	122.83	\$	172.68	\$	222.83	\$	291.33	\$	380.24	\$	463.69	\$	588.04	34%	15.69
		Total		\$	180.00	\$	174.43	\$	212.83	\$	262.68	\$	309.83	\$	374.33	\$	459.24	\$	528.69	\$	639.04	21%	11.69
Cash Flow fr	rom Operating	z Activities (5000)																				
	Net Income	,		Ś	-	Ś	(15,58)	Ś	28,41	Ś	44.85	Ś	45.15	Ś	63.50	Ś	83.91	Ś	78.45	Ś	119.35		
	Depreciation			Ś	-	Ś	5.00	\$	5.00	Ś	5.00	\$	5.00	\$	5.00	\$	5.00	\$	5.00	\$			
	Increase in A		able	Ś	5.00	Ś	5.00	\$	5.00	\$	5.00	\$	7.00	\$	6.00	\$	6.00	\$	6.00	\$			
	Increase in A			Ś		S		Ś		S		Ś		Ś		Ś		Ś		S			
	(Increase in	Accounts Rec	eivable)	Ś	(5.00)	Ś	(15.00)	Ś	(13.00)	Ś	(13.00)	Ś	(13.00)	Ś	(10.00)	Ś	(10.00)	Ś	(10.00)	S	(10.00)		
	(Increase in I	nventory)		\$	(40.00)	\$	-	\$	(20.00)	\$	(25.00)	\$	(25.00)	\$	(25.00)	\$	(25.00)	\$	(25.00)	\$	(25.00)		
	Net Cash Flo		rations	\$	(40.00)	\$	(20.58)	\$	5.41	\$	16.85	\$	19.15	\$	39.50	\$	59.91	\$	54.45	\$	95.35		
Cash Flow fr	rom Investing	Activities (\$	000)																				
	Proceeds Fro	m the Sale o	f Assets	\$	-	\$	-	\$		\$		\$		\$		\$		\$		\$			
	(Purchases o	f Property ar	nd Equipment)	\$	(50.00)	\$	(15.00)	\$	(15.00)	\$	(5.00)	\$	(5.00)	\$	(5.00)	\$	(5.00)	\$	(5.00)	\$	(5.00)		
	Net Cash Fro	m Investing	Activities	\$	(50.00)	\$	(15.00)	\$	(15.00)	\$	(5.00)	\$	(5.00)	\$	(5.00)	\$	(5.00)	\$	(5.00)	\$	(5.00)		
Cash Flow fr	rom Financing	Activities (\$	000)																				
	Net Borrowi			\$	-	\$	-	\$	-	\$		\$	-	\$		\$		\$	-	\$			
	Proceeds Fro			\$	75.00	\$	-	\$	-	\$		\$	-	\$		\$		\$	-	\$	-		
	Owner Capit			\$	75.00	\$	-	\$	-	\$		\$	-	\$		\$		\$		\$			
	Proceeds Fro		ock	\$	25.00	\$	-	\$	-	\$		\$		\$		\$		\$		\$	-		
	(Repayment					\$	-	\$	-	\$	(5.00)	\$	(10.00)	\$	(10.00)	\$	(10.00)	\$	(20.00)	\$	(20.00)		
	(Dividends P					\$	-	\$	-	\$	-	\$	-	\$		\$		\$		\$	-		
	Net Cash Fro	m Financing	Activities	\$	175.00	\$	-	\$	-	\$	(5.00)	\$	(10.00)	\$	(10.00)	\$	(10.00)	\$	(20.00)	\$	(20.00)		
	Change in Ca	sh Deleses		S	85.00	Ś	(35.58)	Ś	(9.59)	\$	6.85	Ś	4.15	Ś	24.50	Ś	44.91	Ś	29,45	s	70.35		

Exhibit (A2)

Revenue Mix Detail			start-up year	<		past actuals			 >	c	urrent year	<		-for	ecast	 >	CAGR	CAGR
			2009	20	10	2011		2012	2013	ľ	2014E		2015F		2016F		(2010-2014E)	
	Bicycle Units	Sold															(,	,
		Mountain Bi	kes		.00	150		200	225		250		275		300	350	26%	8.4%
		Hybrid Bikes			75	100		150	225		300		325		350	400	41%	7.2%
		Road Bikes			50	60		70	80		90		100		110	130	16%	9.1%
		Comfort Bik	es		25	30		35	40		45		50		55	60	16%	6.3%
		Cruiser Bike:			10	15		20	25		30		40		50	60	32%	14.5%
					60	355		475	595		715		790		865	1000	29%	8.2%
	Average Sale	Price																
		Mountain Bi	kes	\$ 800.	00	\$ 800.00	\$ 7	50.00	\$ 750.00	\$	700.00	\$	725.00	\$	750.00	\$ 775.00	-3%	2.2%
		Hybrid Bikes		\$ 550.	00	\$ 525.00	\$ 50	00.00	\$ 475.00	Ś	450.00	\$	475.00	\$	500.00	\$ 525.00	-5%	3.4%
		Road Bikes		\$ 400.	00	\$ 400.00	\$ 40	00.00	\$ 400.00	\$	400.00	\$	400.00	\$	400.00	\$ 400.00	0%	0.0%
		Comfort Bik	es	\$ 175.	00	\$ 170.00	\$ 1	65.00	\$ 160.00	\$	155.00	\$	150.00	\$	150.00	\$ 150.00	-3%	0.0%
		Cruiser Bike:	5	\$ 150.	00	\$ 150.00	\$ 1	50.00	\$ 150.00	\$	150.00	\$	150.00	\$	150.00	\$ 150.00	0%	0.0%
	Bicycle Dolla	r Sales																
		Mountain Bi	kes	\$ 80,0	00	\$ 120,000	\$ 15	0,000	\$ 168,750	\$	175,000	\$	199,375	\$	225,000	\$ 271,250	22%	10.8%
		Hybrid Bikes		\$ 41,2	50	\$ 52,500	\$ 7	5,000	\$ 106,875	\$	135,000	\$	154,375	\$	175,000	\$ 210,000	35%	10.8%
		Road Bikes		\$ 20,0	00	\$ 24,000	\$ 2	8,000	\$ 32,000	\$	36,000	\$	40,000	\$	44,000	\$ 52,000	16%	9.1%
		Comfort Bik	es	\$ 4,3	75	\$ 5,100	\$	5,775	\$ 6,400	\$	6,975	\$	7,500	\$	8,250	\$ 9,000	12%	6.3%
		Cruiser Bike:	5	\$ 1,5	00	\$ 2,250	\$	3,000	\$ 3,750	\$	4,500	\$	6,000	\$	7,500	\$ 9,000	32%	14.5%
				\$ 147,1	25	\$ 203,850	\$ 26	1,775	\$ 317,775	\$		\$	407,250	\$	459,750	\$ 551,250	25%	10.6%
	Bicycle Gros	s Margin %																
		Mountain Bi	kes	4	0%	39%		38%	37%		36%		36%		36%	36%		
		Hybrid Bikes		3	8%	38%		38%	38%		38%		38%		38%	38%		
		Road Bikes		3	5%	35%		33%	33%		30%		30%		30%	30%		
		Comfort Bik	es	3	2%	32%		32%	32%		32%		32%		32%	32%		
		Cruiser Bike:	5	3	0%	30%		30%	30%		30%		30%		30%	30%		
	Gross Margi	n \$																
		Mountain Bi	kes	\$ 32,0	00	\$ 46,800	\$ 5	7,000	\$ 62,438	\$	63,000	\$	71,775	\$	81,000	\$ 97,650	18%	10.8%
		Hybrid Bikes		\$ 15,6	75	\$ 19,950	\$ 2	8,500	\$ 40,613	\$	51,300	\$	58,663	\$	66,500	\$ 79,800	35%	10.8%
		Road Bikes		\$ 7,0	00	\$ 8,400	\$	9,240	\$ 10,560	\$	10,800	\$	12,000	\$	13,200	\$ 15,600	11%	9.1%
		Comfort Bik	es	\$ 1,4	00	\$ 1,632	\$	1,848	\$ 2,048	\$	2,232	\$	2,400	\$	2,640	\$ 2,880	12%	6.3%
		Cruiser Bike:	5	\$ 4	50	\$ 675	\$	900	\$ 1,125	\$	1,350	\$	1,800	\$	2,250	\$ 2,700	32%	14.5%
		Total		\$ 56,5	25	\$ 77,457	\$ 9	7,488	\$ 116,783	\$	128,682	\$	146,638	\$	165,590	\$ 198,630	23%	10.6%
		Wtd GM %		38.4	2%	38.00%	3	7.24%	36.75%		36.00%		36.01%		36.02%	36.03%		
	Parts Sales \$			\$25,0		\$75,000		50,000	\$175,000		\$220,000		\$250,000		\$275,000	\$300,000	72%	6.3%
	Accessories			\$17,5		\$25,000		50,000	\$80,000		\$120,000		\$150,000		\$160,000	\$175,000	62%	5.3%
	Service Sales			\$12,0		\$30,000		40,000	\$80,000		\$120,000		\$140,000		\$160,000	\$180,000	78%	8.7%
	Total PAS Sa	les \$		\$54,5	00	\$130,000	\$24	40,000	\$335,000		\$460,000		\$540,000		\$595,000	\$655,000	70%	6.6%
	COAND TOT	AL CALES Ó		6201	25	¢222.050	ć.c.	21 775	ACE 2 775		6047.475		C047.250	_	1 054 750	1 200 200	420/	0.40/
	GRAND TOTA			\$201,6		\$333,850		01,775	\$652,775		\$817,475		\$947,250	\$	1,054,750	\$ 1,206,250	42%	8.4%
	Bike % of To	tai Sales		73.	0%	61.1%		52.2%	48.7%		43.7%		43.0%		43.6%	45.7%		

Exhibit (A3)

		start-up	year	<	past actuals		>	current year	<	-forecast	>	CAGR	CAGR	
			2009	2010	2011	2012	2013	2014E	2015F	2016F	2017F	(2010-2014E)	(2014E-2017F))
oss Margin % Mix D	etail													
	Bicycles			38.42%	38.00%	37.24%	36.75%	36.00%	36.01%	36.02%				
	Parts			60.00%	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%			
	Accessories			70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%			
	Service			60.00%	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%			
ross Margin \$ Mix de	etail													
	Bicycles			\$ 56,525	\$ 77,457	\$ 97,488	\$ 116,783	\$ 128,682	\$ 146,638	\$ 165,590	\$ 198,630	23%	10.6%	
	Parts			\$ 15,000	\$ 45,000	\$ 90,000	\$ 105,000	\$ 132,000	\$ 150,000	\$ 165,000	\$ 180,000	72%	6.3%	
	Accessories			\$ 12,250	\$ 17,500	\$ 35,000	\$ 56,000	\$ 84,000	\$ 105,000	\$ 112,000	\$ 122,500	62%	5.3%	
	Service				\$ 18,000	\$ 24,000	\$ 48,000	\$ 72,000	\$ 84,000	\$ 96,000	\$ 108,000	78%	8.7%	
	Total				\$ 157,957	\$ 246,488	\$ 325,783	\$ 416,682	\$ 485,638	\$ 538,590	\$ 609,130	46%	7.8%	
	GM%			45.1%	47.3%	49.1%	49.9%	51.0%	51.3%	51.1%	50.5%			
	GIVI70		_	43.170	47.570	43.170	45.570	31.070	31.370	31.170	30.370			
			-											
			-											
perating Expense \$\$	Dotail		-											
perating Expense \$\$					ć 20.000	ć co.occ	¢ 00.000	ć 120.000	ć 120.000	ć 150.000	£ 160.000	#DD//O'	7 22	
	Masters Sala			\$ -	\$ 20,000	\$ 60,000	\$ 80,000	\$ 120,000	\$ 130,000	\$ 150,000	\$ 160,000	#DIV/0!	7.2%	
	Hourly Wage	S			\$ 41,600	\$ 41,600	\$ 83,200	\$ 83,200	\$ 83,200	\$ 124,800	\$ 124,800	19%	14.5%	
	Occupancy			\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	0%	0.0%	
	Advertising				\$ 12,000	\$ 20,000	\$ 35,000	\$ 50,000	\$ 75,000	\$ 75,000	\$ 75,000	50%	0.0%	
	Supplies/Pos				\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	0%	0.0%	
	Depreciation				\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000	0%	0.0%	
	Insurance				\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	0%	0.0%	
	Telephone				\$ 1,200	\$ 1,200	\$ 1,200	\$ 1,200	\$ 1,200	\$ 1,200	\$ 1,200	0%	0.0%	
	Automobile			\$ 1,000	\$ 1,000	\$ 2,000	\$ 3,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	50%	0.0%	
	Prof Services			\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000	19%	0.0%	
	Licenses & Ta			\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	0%	0.0%	
	Travel & Ent			\$ 1,500	\$ 1,500	\$ 1,500	\$ 3,000	\$ 5,000	\$ 7,500	\$ 7,500	\$ 7,500	35%	0.0%	
	All Other			\$ 3,000	\$ 4,000	\$ 5,000	\$ 5,000	\$ 8,000	\$ 10,000	\$ 10,000	\$ 10,000	28%	0.0%	
	Total			\$ 102,800	\$ 125,800	\$ 175,800	\$ 254,900	\$ 318,900	\$ 358,400	\$ 420,000	\$ 430,000	33%	6.3%	
perating Expense %				J 102,000	Ç 125,000	\$ 175,000	\$ 254,500	\$ 510,500	\$ 550,400	\$ 420,000	\$ 450,000	5570	0.570	
perating expense 20 i			-	0.0%	6.0%	12.0%	12.3%	14.7%	13.7%	14.2%	13.3%			1
	Salary	_	-	20.6%	12.5%	8.3%	12.7%	10.2%	8.8%	11.8%	10.3%			
	Hourly Wage	S	-											
	Occupancy		-	14.9%	9.0%	6.0%	4.6%	3.7%	3.2%	2.8%	2.5%			
	Advertising		_	5.0%	3.6%	4.0%	5.4%	6.1%	7.9%	7.1%	6.2%			
	Supplies/Pos			2.5%	1.5%	1.0%	0.8%	0.6%	0.5%	0.5%	0.4%			
	Depreciation			1.5%	0.9%	0.6%	0.5%	0.4%	0.3%	0.3%	0.2%			
	Insurance			1.2%	0.7%	0.5%	0.4%	0.3%	0.3%	0.2%	0.2%			
	Telephone			0.6%	0.4%	0.2%	0.2%	0.1%	0.1%	0.1%	0.1%			
	Automobile			0.5%	0.3%	0.4%	0.5%	0.6%	0.5%	0.5%	0.4%			
	Prof Services			1.0%	0.6%	0.4%	0.3%	0.5%	0.4%	0.4%	0.3%			
	Licenses & Ta	exes		1.0%	0.6%	0.4%	0.3%	0.2%	0.2%	0.2%	0.2%			
	Travel & Ent			0.7%	0.4%	0.3%	0.5%	0.6%	0.8%	0.7%	0.6%			
	All Other			1.5%	1.2%	1.0%	0.8%	1.0%	1.1%	0.9%	0.8%			
	Total			51.0%	37.7%	35.0%	39.0%	39.0%	37.8%	39.8%	35.6%			
			-	52.570	37.770	33.070	33.070	55.070	57.070	33.070	55.070			
			-											
eadcount & Wage De	etail		-											
aucount or wage De	ccon		-											
andequat	Managara		-	-	-	-	-	-	-	-	2			
eadcount	Managers		-	2	2	2	2	2		2				
	Salespersons		-	1	1	1	2	2		3				
	Mechanics		-	1	1	1	2	2	2	3	3			
/age Rate/Hr	Managers			n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.			
	Salespersons			\$9.00	\$9.00	\$9.00	\$9.00	\$9.00	\$9.00	\$9.00	\$9.00			
	Mechanics			\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00			
ours Worked	Managers			n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.			
er Person Per Year	Salespersons			2080	2080	2080	2080	2080	2080	2080	2080			
	Mechanics			2080	2080	2080	2080	2080	2080	2080	2080			
/ages/Year	Managers			\$0.00	\$20,000.00	\$60,000.00	\$80,000.00	\$120,000.00	\$130,000.00	\$150,000.00	\$160,000.00			
-6/	ununugula		-	\$0.00	, 20,000.00	+00,000.00	+00,000.00	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, , , , , , , , , , , , , , , , , , , ,	, _50,555.00	+ 100,000.00			
	Salespersons		-	\$18,720.00	\$18,720.00	\$18,720.00	\$37,440.00	\$37,440.00	\$37,440.00	\$56,160.00	\$56,160.00			
	Mechanics			\$22,880.00	\$22,880.00	\$22,880.00	\$45,760.00	\$45,760.00	\$45,760.00	\$68,640.00				
		Wages	-	\$41,600.00	\$41,600.00	\$41,600.00	\$83,200.00	\$83,200.00	\$83,200.00					
	Total Hourly	vvage5	-											
	Pct of Sales			21%	12%	8%	13%	10%	9%	12%	10%			

Exhibit (A4)

Sales by Mo	nth (2010-2013)(\$000)													
sales by IVIO	intii (2010-2013)(3000)													
		January	February	March	April	May	June	July	August	September	October	November	December	Total
	2010	4.30	12.50	21.30	25.70	33.61	36.50	17.12	15.30	12.90	8.40	5.00	9.00	201.
	2011	2.00	8.70	45.60	45.90	65.10	45.70	37.10	25.30	21.36	13.91	8.28	14.90	333.
	2012	5.02	20.57	41.65	81.29	70.25	78.28	67.24	28.10	28.60	29.61	22.58	28.60	501.
	2013	15.67	22.85	75.07	74.42	112.93	108.36	68.54	52.22	29.38	31.99	20.89	40.47	652.
Sales by Mo	nth as % of Annual Sales	(2010-2013)												
		January	February	March	April	May	June	July	August	September	October	November	December	Total
	2010	2.1%	6.2%	10.6%	12.7%	16.7%	18.1%	8.5%	7.6%	6.4%	4.2%	2.5%	4.5%	100.0
	2011	0.6%	2.6%	13.7%	13.7%	19.5%	13.7%	11.1%	7.6%	6.4%	4.2%	2.5%	4.5%	100.0
	2012	1.0%	4.1%	8.3%	16.2%	14.0%	15.6%	13.4%	5.6%	5.7%	5.9%	4.5%	5.7%	100.0
	2013	2.4%	3.5%	11.5%	11.4%	17.3%	16.6%	10.5%	8.0%	4.5%	4.9%	3.2%	6.2%	100.0
nventory by	y Month (2010-2013)(\$00	(0)												
		January	February	March	April	May	June	July	August	September	October	November	December	
	2010	January 40	34	23	50	35	35	July 40	August 40	3eptember 40	40		40	
	2011	40	45	50	60	60	60	60			60			
	2012	60	60	45	45	50	55	60	65	70	75		85	
	2013	85	85	85	70	75	80	85	90		100	105	110	
nventory b	y Month as % of Annual S	ales (2010-2013	3)											
		January	February	March	April	Mav	June	July	August	September	October	November	December	
	2010	19.8%	16.9%	11.4%	24.8%	17.4%	17.4%	19.8%	19.8%	19.8%	19.8%	19.8%	19.8%	
	2010	12.0%	13.5%	15.0%	18.0%	18.0%	18.0%	18.0%	18.0%	18.0%	18.0%	18.0%	18.0%	
	2012	12.0%	12.0%	9.0%	9.0%	10.0%	11.0%	12.0%	13.0%	14.0%	14.9%	15.9%		
	2013	13.0%	13.0%	13.0%	10.7%	11.5%	12.3%	13.0%	13.8%	14.6%	15.3%	16.1%	16.9%	
	2013	15.0%	15.0%	15.070	10.770	11.5%	12.570	15.070	15.070	14.070	13.570	10.170	10.570	
# of Custom	er Visits by Month (2010-	-2013)												
			Fabruary.	Manak	A:1	Mari		lub.	A	Cantambas	Ostabas	Navanhaa	Danambaa	
	2010	January 200	February 300	March 435	April 500	May 550	June 525	July 345	August 375	September 400	October 345	November 200	December 325	
				435										
	2011	225 250	330		550 605	605 666	578 635	380	413 454	440	396	356	321 353	
	2012	250	363 399	526 579	666	732	699	417 459	454	484 532	436 479	392 431	388	
			399	379	000	/32	099	439	433	332	4/3	431	300	
# of Custom	ers Purchasing by Month	(2010-2013)												
		January	February	March	April	May	June	July	August	September	October	November	December	
	2010	10	21	39	45	55	53	28	30		24	14	33	
	2011	11	23	43	50	61	58	30	33	35	32	29	26	
	2012	8	25	47	54	67	64	33	36	39	35		42	
	2013	11	28	46	60	73	70	37	60	43	38	34	43	
Customer Co	onversion Rate by Month	(2010-2013); (Conversion %	= (# Purchasi	ng/#Visiting)								
		January	February	March	April	May	June	July	August	September	October	November	December	
	2010	5.0%	7.0%	9.0%	9.0%	10.0%	10.0%	8.0%	8.0%	8.0%	7.0%	7.0%	10.0%	
	2011	5.0%	7.0%	9.0%	9.0%	10.0%	10.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	
	2012	3.0%	7.0%	9.0%	9.0%	10.0%	10.0%	8.0%	8.0%	8.0%	8.0%	8.0%	12.0%	
	2013	4.0%	7.0%	8.0%	9.0%	10.0%	10.0%	8.0%	12.0%	8.0%	8.0%	8.0%	11.0%	
Average Cho	eckout Ticket Value by M	onth (2010-201	3); ACTV = (Sa	les/ # Custor	ners Purchasi	ng)								
	2015	January	February	March	April	May	June	July	August	September	October	November	December	
	2010	\$ 430.00	\$ 595.24	\$ 544.06	\$ 571.11	\$ 611.00	\$ 695.24	\$ 620.29	\$ 510.00	\$ 403.13	\$ 347.88	\$ 357.14	\$ 276.92	
	2011	\$ 382.22	\$ 541.13	\$ 494.60	\$ 519.19	\$ 555.45	\$ 632.03	\$ 563.90	\$ 766.67	\$ 606.80	\$ 439.09	\$ 290.36	\$ 580.72	
	2012	\$ 573.33	\$ 491.93	\$ 449.64	\$ 471.99	\$ 504.96	\$ 574.58	\$ 512.64	\$ 774.10	\$ 738.67	\$ 849.55	\$ 719.96	\$ 675.51	
	2013			\$ 459.86	\$ 429.08		\$ 522.34	\$ 466.03	\$ 871.90	\$ 689.69	\$ 834.43	\$ 605.49	\$ 947.98	

Exhibit (B)

(Numbers in thousands)		2000	2010	Change	Change %
Total U.S. Population		281,421	308,745	27,324	9.7%
Bicycle Riders (6 times/	r or more)	43,135	39,789	(3,346)	-7.8%
Percent of Total U.S. Po	pulation	15.3%	12.9%		
Total Child Population (ages 1-17)	72,293	74,181	1,888	2.6%
Child Bike Riders (ages 7	'-17)	18,509	14,587	(3,922)	-21.2%
Child Bike Riders as % o	Total Children	25.6%	19.7%		
Child Bike Riders as % o	All Bike Riders	42.9%	36.7%		
Total Adult Population		209,128	234,564	25,436	12.2%
Adult Bike Riders (6 tim	es/yr or more)	24,626	25,202	576	2.3%
% of Adult Population		11.8%	10.7%		
% of All Bike Riders		57.1%	63.3%		
Total Adult Male Popula	tion	100,996	113,836	12,840	12.7%
Adult Male Bike Riders	>6 times/yr)	11,742	13,589	1,847	15.7%
% of All Adult Males		11.6%	11.9%		
% of All Adult Bike Rider	S	47.7%	53.9%		
Total Adult Female Pop	ulation	108,133	120,728	12,595	11.6%
Adult Female Bike Rider	s (>6 times/yr)	12,884	11,608	(1,276)	-9.9%
% of All Adult Females		11.9%	9.6%		
% of Adult Bike Riders		52.3%	46.1%		
Source: U.S. Census Bur	eau: National Spo	orting Goods A	Association		

Exhibit (C)

			2005	2006	2007	2008	2009	2010	2011	2012	2013	CAGR
Calas / C Dillia	ns)(all wheel sizes)(see no	to 1\	\$6.10	\$5.80	\$6.00	\$6.00	\$5.60	\$6.00	\$6.00	\$6.10	\$5.80	-0.63°
		te 1)	19.80	18.20	18.20	18.50	14.90	19.80	15.70	18.70	16.20	-0.63
•	ns) (all wheel sizes) ns) (20"diameter wheels ar	411	14.00	12.70	12.80	13.40	10.20	13.50	11.00	13.00	11.30	-2.46
•	* * * * * * * * * * * * * * * * * * * *	• •										
Units (Million	ns) (wheels smaller than 20	" diameter)	5.80	5.50	5.40	5.10	4.70	6.30	4.70	5.70	4.90	-2.09
D'- 14/h l	- D-t T-t- Di -	6-14-	70 740/	CO 700/	70.220/	70.400/	68.46%	CO 100/	70.000/	CO F20/	60.750/	
big wheels as	s Pct of Total Bicycle Units	50IQS	70.71%	69.78%	70.33%	72.43%	68.46%	68.18%	70.06%	69.52%	69.75%	
Note: (1) reta	ail sales of of new (not use	d) bicycles, related pa	rts and accessories, t	through all dis	tribution char	nnels						
Specialty Bic	ycle Units Sold 2005-2013	(millions)	2.97	2.73	2.73	2.775	2.235	2.97	2.355	2.805	2.43	
Specialty Bic	ycles Unit Market Share b	y Category 2005-2013										
			2005	2006	2007	2008	2009	2010	2011	2012	2013	
Mountain			29%	24%	25%	26%	24%	22%	23%	25%	25%	
Hybrid			14%	19%	17%	18%	21%	21%	20%	24%	24%	
Road			16%	18%	21%	20%	20%	23%	24%	20%	20%	
Comfort			14%	17%	15%	16%	15%	13%	14%	13%	13%	
Youth			15%	14%	12%	12%	13%	12%	12%	12%	12%	
Cruiser			6%	6%	7%	6%	6%	6%	6%	5%	5%	
Recumbent			2%	1%	3%	1%	1%	2%	1%	2%	2%	
Electric								0.6%	0.3%	0.5%	0.5%	
Folding								0.2%	0.4%	0.4%	0.4%	
Specialty Ric	vcles Average Gross Marg	n by Category 2005-2	012									
opecially bic	yeles Average Gloss Hall	in by category 2005-2	2005	2006	2007	2008	2009	2010	2011	2012	2013	
Mountain			50%	49%	47%	45%	43%	41%	39%	37%	36%	
Hybrid			45%	44%	43%	42%	41%	40%	39%	38%	38%	
Road			40%	39%	38%	37%	36%	35%	33%	32%	30%	
Comfort			35%	35%	35%	34%	34%	33%	32%	31%	30%	
Youth			40%	40%	40%	40%	40%	40%	40%	40%	40%	
Cruiser			35%	35%	35%	34%	34%	33%	33%	31%	30%	
Recumbent								15%	15%	15%	15%	
Electric								20%	20%	20%	20%	
Folding								10%	10%	10%	10%	

Exhibit (D)

Average Retail Price of Bicycles in the United States (2013) by Distribution Channel

Specialty Bicycle Retailers Enjoy the Highest Average Price
Source: National Bicycle Dealers Association

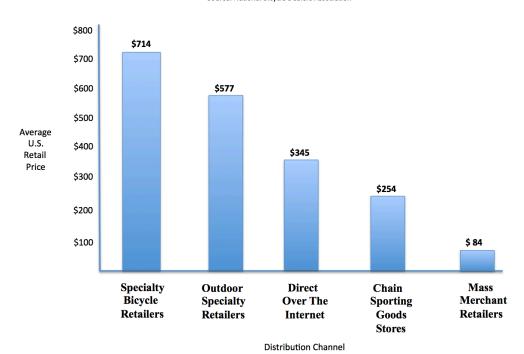
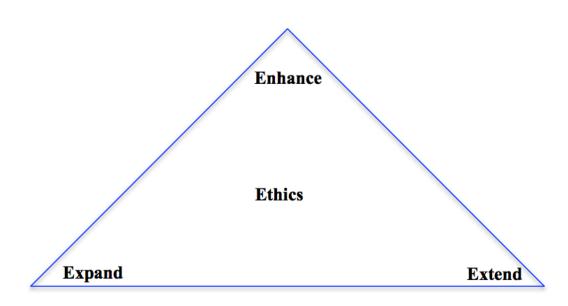


Exhibit (E)

				2000	2010	Change	96 Ch	ange		
Total Adu	ılt Bike Rider			24,626	25,202		76	2.3%		
	Adult Rider	-	ove (ve)	3,008	3,379			12.3%		
	% of All Ride	•	ays/yr/	12.2%	13.4%		/1	12.570		
							ce	15.20/		
	ılt Frequents	•		1,739	2,004		65	15.2%		
	requents			57.8%	59.3%					
	dult Frequer	nts		1,269	1,375		06	8.4%		
% of All F	requents			42.2%	40.7%					
Bicycle Ri	iding Particip	ants and C	ccasional P	articipants	who ride 2	5-109 days	a year (in	thousands)	by sex, 200	0 & 201
				2000	2010	Change	% Ch	ange		
Total Adu	ılt Bike Rider	s		24,626	25,202	5	76	2.3%		
Occasion	al Adult Ride	rs(25-109	days/yr	10,893	10,671	(2:	22)	-2.0%		
Occasion	al % of All Ri	ders		44.2%	42.3%					
	It Occasiona			5,290	5,862	5	72	10.8%		
	Occasionals			48.6%	54.9%			20.070		
	dult Occasio	nals		5,603	4,809		94) -	14.2%		
	Occasionals	iidis		51.4%	45.1%	-	-	14.270		
Bicvcle Ri	iding Particip	ants and Ir	nfrequent P	articipants	who ride 6	24 days a	vear (in th	ousands) by	v sex. 2000 l	& 2010
,				2000	2010			ange		
T-4-1 A d.	ılt Bike Rider	_								
		_		24,626	25,202		76	2.3%		
	nt Adult Ride		ys/yr)	10,639	11,149		10	4.8%		
	nt % of All Ri			43.2%	44.2%					
Male Adu	ılt Infrequen	ts		4,713	5,725	1,0	12	21.5%		
	nfrequents			44.3%	51.3%					
Female A	dult Infrequ	ents		5,926	5,424	(5	02)	-8.5%		
Female A % of All Ir	•					(5	02)	-8.5%		
Female A % of All II Source: G	dult Infrequents	ley Group	Bicycle Riding	5,926 55.7%	5,424 48.7%	(5	02)	-8.5%		
Female A % of All II Source: G	dult Infrequ nfrequents Gluskin Town	ley Group	Bicycle Riding	5,926 55.7%	5,424 48.7%	(5	55-64	-8.5%	75+	
Female A % of All II Source: G	dult Infrequ nfrequents Gluskin Town	ley Group		5,926 55.7% Participants	5,424 48.7% by Age & Sex	(5)			75+ 87.4	
Female A % of All II Source: G	dult Infrequents Gluskin Town	ley Group Days Among	18-24	5,926 55.7% Participants I	5,424 48.7% by Age & Sex 35-44	45-54	55-64	65-74		
Female A % of All II Source: G Average No	dult Infrequents Sluskin Town umber of Riding	Days Among Total 57.0 49.1	18-24 44.6 46.6	5,926 55.7% Participants 25-34 48.4 37.6	5,424 48.7% by Age & Sex 35-44 53.1 43.3	45-54 59.5	55-64 63.9	65-74 73.0	87.4	
Female A % of All II Source: G Average No	dult Infrequents Gluskin Town umber of Riding Male Female	Days Among Total 57.0 49.1	18-24 44.6 46.6	5,926 55.7% Participants 25-34 48.4 37.6	5,424 48.7% by Age & Sex 35-44 53.1 43.3	45-54 59.5	55-64 63.9	65-74 73.0	87.4	All Age:
Female A % of All II Source: G Average No	dult Infrequents Gluskin Town umber of Riding Male Female	Days Among Total 57.0 49.1	18-24 44.6 46.6 / Age and Sex (5,926 55.7% Participants I 25-34 48.4 37.6 in thousands)	5,424 48.7% by Age & Sex 35-44 53.1 43.3	45-54 59.5 61.2	55-64 63.9 58.6	65-74 73.0 58.0	87.4 71.1	
Female A % of All II Source: G Average No	dult Infrequents Gluskin Town umber of Riding Male Female Bicycle Riding P	Days Among Total 57.0 49.1 articipants by	18-24 44.6 46.6 Age and Sex (5,926 55.7% Participants 1 25-34 48.4 37.6 in thousands)	5,424 48.7% by Age & Sex 35-44 53.1 43.3	45-54 59.5 61.2	55-64 63.9 58.6	65-74 73.0 58.0	87.4 71.1	25,202
Female A % of All II Source: G Average No	dult Infrequents filus in Town umber of Riding Male Female Bicycle Riding P	Days Among Total 57.0 49.1 articipants by	18-24 44.6 46.6 Age and Sex (18-24 3,868	5,926 55.7% Participants 1 25-34 48.4 37.6 in thousands) 25-34 4,804	5,424 48.7% by Age & Sex 35-44 53.1 43.3 35-44 6,096	45-54 59.5 61.2 45-54 4,926	55-64 63.9 58.6 55-64 3,417	65-74 73.0 58.0	87.4 71.1 75 + 778	25,202 100.09
Female A % of All II Source: G Average No	dult Infrequents Silus kin Town umber of Riding Male Female Bicycle Riding P Total Percent of A	Days Among Total 57.0 49.1 articipants by	18-24 44.6 46.6 Age and Sex (18-24 3,868 15.3%	5,926 55.7% Participants I 25-34 48.4 37.6 in thousands) 25-34 4,804 19.1%	5,424 48.7% by Age & Sex 35-44 53.1 43.3 35-44 6,096 24.2%	45-54 59.5 61.2 45-54 4,926 19.5%	55-64 63.9 58.6 55-64 3,417 13.6%	65-74 73.0 58.0 65-74 1,313 5.2%	87.4 71.1 75+ 778 3.1%	25,202 100.09 13,592
Female A % of All II Source: G Average No	dult Infrequents Sluskin Town umber of Riding Male Female Bicycle Riding P Total Percent of A Male	Days Among Total 57.0 49.1 articipants by	18-24 44.6 46.6 Age and Sex (18-24 3,868 15.3% 2,056 1,812	5,926 55.7% Participants 8 25-34 48.4 37.6 in thousands) 25-34 4,804 19.1% 2,480 2,324	5,424 48.7% by Age & Sex 35-44 53.1 43.3 35-44 6,096 24.2% 3,302 2,794	45-54 59.5 61.2 45-54 4,926 19.5% 2,584 2,342	55-64 63.9 58.6 55-64 3,417 13.6% 1,960 1,457	65-74 73.0 58.0 65-74 1,313 5.2% 764 549	87.4 71.1 75+ 778 3.1% 446 332	All Ages 25,202 100.09 13,592 11,610
Female A % of All II Source: G Average No	dult Infrequents Gluskin Town umber of Riding Male Female Bicycle Riding P Total Percent of A Male Female	Days Among Total 57.0 49.1 articipants by	18-24 44.6 46.6 Age and Sex (18-24 3,868 15.3% 2,056	5,926 55.7% Participants 8 25-34 48.4 37.6 in thousands) 25-34 4,804 19.1% 2,480	5,424 48.7% by Age & Sex 35-44 53.1 43.3 35-44 6,096 24.2% 3,302	45-54 59.5 61.2 45-54 4,926 19.5% 2,584	55-64 63.9 58.6 55-64 3,417 13.6% 1,960	65-74 73.0 58.0 65-74 1,313 5.2% 764 549	87.4 71.1 75+ 778 3.1% 446	25,202 100.09 13,592
Female A % of All II Source: G Average No U.S. Adult	dult Infrequents Gluskin Town umber of Riding Male Female Bicycle Riding P Total Percent of A Male Female Male Morrow Morrow	Days Among Total 57.0 49.1 articipants by	18-24 44.6 46.6 Age and Sex (18-24 3,868 15.3% 2,056 1,812 53.2% 46.8%	5,926 55.7% Participants I 25-34 48.4 37.6 in thousands) 25-34 4,804 19.1% 2,480 2,324 51.6% 48.4%	5,424 48.7% by Age & Sex 35-44 53.1 43.3 35-44 6,096 24.2% 3,302 2,794 54.2% 45.8%	45-54 59.5 61.2 45-54 4,926 19.5% 2,584 2,342 52.5% 47.5%	55-64 63.9 58.6 55-64 3,417 13.6% 1,960 1,457	65-74 73.0 58.0 65-74 1,313 5.2% 764 549	87.4 71.1 75+ 778 3.1% 446 332 57.3%	25,202 100.09 13,592 11,610
Female A % of All II Source: G Average No U.S. Adult	Male Female	Days Among Total 57.0 49.1 articipants by	18-24 44.6 46.6 Age and Sex (18-24 3,868 15.3% 2,056 1,812 53.2% 46.8% ousehold inco	5,926 55.7% Participants 8 25-34 48.4 37.6 in thousands) 25-34 4,804 19.1% 2,480 2,324 51.6% 48.4% me and Partic	5,424 48.7% by Age & Sex 35-44 53.1 43.3 35-44 6,096 24.2% 3,302 2,794 54.2% 45.8% ipation Frequ	45-54 59.5 61.2 45-54 4,926 19.5% 2,584 2,342 52.5% 47.5%	55-64 63.9 58.6 55-64 3,417 13.6% 1,960 1,457 57.4% 42.6%	65-74 73.0 58.0 65-74 1,313 5.2% 764 549 58.2% 41.8%	87.4 71.1 75+ 778 3.1% 446 332 57.3%	25,202 100.09 13,592 11,610
Female A % of All II Source: G Average No U.S. Adult	Male Female	Days Among Total 57.0 49.1 articipants by	18-24 44.6 46.6 Age and Sex (18-24 3,868 15.3% 2,056 1,812 53.2% 46.8% ousehold inco	5,926 55.7% Participants I 25-34 48.4 37.6 in thousands) 25-34 4,804 19.1% 2,480 2,324 51.6% 48.4%	5,424 48.7% by Age & Sex 35-44 53.1 43.3 35-44 6,096 24.2% 3,302 2,794 54.2% 45.8% ipation Frequ	45-54 59.5 61.2 45-54 4,926 19.5% 2,584 2,342 52.5% 47.5% ency	55-64 63.9 58.6 55-64 3,417 13.6% 1,960 1,457 57.4% 42.6%	65-74 73.0 58.0 65-74 1,313 5.2% 764 549 58.2% 41.8%	87.4 71.1 75+ 778 3.1% 446 332 57.3%	25,202 100.09 13,592 11,610
Female A % of All II Source: G Average No U.S. Adult	dult Infrequents Sluskin Town umber of Riding Male Female Bicycle Riding P Total Percent of A Male Female Male % of To Female % of ing Participants	Total 57.0 49.1 articipants by II Ages by Median H	18-24 44.6 46.6 Age and Sex (18-24 3,868 15.3% 2,056 1,812 53.2% 46.8% ousehold inco	5,926 55.7% Participants 8 25-34 48.4 37.6 in thousands) 25-34 4,804 19.1% 2,480 2,324 51.6% 48.4% me and Partic	5,424 48.7% by Age & Sex 35-44 53.1 43.3 35-44 6,096 24.2% 3,302 2,794 54.2% 45.8% ipation Frequ	45-54 59.5 61.2 45-54 4,926 19.5% 2,584 2,342 52.5% 47.5% ency 0-\$50,000 50%	55-64 63.9 58.6 55-64 3,417 13.6% 1,960 1,457 57.4% 42.6% \$50,000 +	65-74 73.0 58.0 65-74 1,313 5.2% 764 549 58.2% 41.8%	87.4 71.1 75+ 778 3.1% 446 332 57.3%	25,202 100.09 13,592 11,610
Female A % of All II Source: G Average No U.S. Adult	Male Female Male Female Male Female Male Female All US House All Bike Ride	Total 57.0 49.1 articipants by II Ages by Median H	18-24 44.6 46.6 Age and Sex (18-24 3,868 15.3% 2,056 1,812 53.2% 46.8% ousehold inco	5,926 55.7% Participants 8 25-34 48.4 37.6 in thousands) 25-34 4,804 19.1% 2,480 2,324 51.6% 48.4% me and Partic	5,424 48.7% by Age & Sex 35-44 53.1 43.3 35-44 6,096 24.2% 3,302 2,794 54.2% 45.8% ipation Frequ	45-54 59.5 61.2 45-54 4,926 19.5% 2,584 2,342 52.5% 47.5% ency 0-\$50,000 50% 25%	55-64 63.9 58.6 55-64 3,417 13.6% 1,960 1,457 57.4% 42.6% \$50,000 +	65-74 73.0 58.0 65-74 1,313 5.2% 764 549 58.2% 41.8% \$100,000+ 20% 31%	87.4 71.1 75+ 778 3.1% 446 332 57.3%	25,200 100.0 13,590 11,610
Female A % of All II Source: G Average No U.S. Adult	Male Female Male Female Male Female Male Female All US House All US House All Bike Ride Frequent Rid	Days Among Total 57.0 49.1 articipants by Il Ages Il Ages by Median H	18-24 44.6 46.6 Age and Sex (18-24 3,868 15.3% 2,056 1,812 53.2% 46.8% ousehold inco	5,926 55.7% Participants 8 25-34 48.4 37.6 in thousands) 25-34 4,804 19.1% 2,480 2,324 51.6% 48.4% me and Partic	5,424 48.7% by Age & Sex 35-44 53.1 43.3 35-44 6,096 24.2% 3,302 2,794 54.2% 45.8% ipation Frequ	45-54 59.5 61.2 45-54 4,926 19.5% 2,584 2,342 52.5% 47.5% ency 0-\$50,000 50% 25% 46%	55-64 63.9 58.6 55-64 3,417 13.6% 1,960 1,457 57.4% 42.6% \$50,000 + 50% 65% 54%	65-74 73.0 58.0 58.0 65-74 1,313 5.2% 764 549 58.2% 41.8% \$100,000+ 20% 31% 26%	87.4 71.1 75+ 778 3.1% 446 332 57.3%	25,202 100.09 13,592 11,610
Female A % of All II Source: G Average No U.S. Adult	Male Female Male Female Male Female Male Female All US House All Bike Ride	Total 57.0 49.1 articipants by Il Ages by Median H holds rs lers iders	18-24 44.6 46.6 Age and Sex (18-24 3,868 15.3% 2,056 1,812 53.2% 46.8% ousehold inco	5,926 55.7% Participants 8 25-34 48.4 37.6 in thousands) 25-34 4,804 19.1% 2,480 2,324 51.6% 48.4% me and Partic	5,424 48.7% by Age & Sex 35-44 53.1 43.3 35-44 6,096 24.2% 3,302 2,794 54.2% 45.8% ipation Frequ	45-54 59.5 61.2 45-54 4,926 19.5% 2,584 2,342 52.5% 47.5% ency 0-\$50,000 50% 25%	55-64 63.9 58.6 55-64 3,417 13.6% 1,960 1,457 57.4% 42.6% \$50,000 +	65-74 73.0 58.0 58.0 65-74 1,313 5.2% 764 549 58.2% 41.8% \$100,000+ 20% 31% 26% 31%	87.4 71.1 75+ 778 3.1% 446 332 57.3%	25,202 100.09 13,592 11,610

Exhibit (F)



Masters Specialty Bicycle Company

Cognitive Model for Growth