SECURISEAT

Because you have enough to worry about

Section B1, Team 2 Fall Semester 2014

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AUTHENTICITY STATEMENT

*This business plan is the original work of the undersigned. All facts and figures are authentic. All contributions from others have been **appropriately acknowledged**. We have not read, reviewed or used any past Core plans in any way in the development of our plan. We did not misrepresent ourselves to suppliers or to anyone else who contributed information to this plan.*

We each understand that the ideas, analysis and text contained in our plan are the collective intellectual property of our team.

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EXECUTIVE SUMMARY

Company Overview

SecuriSeat is a socially responsible and environmentally conscious company, dedicated to manufacturing and distributing a secure, durable, and innovative bike locking mechanism that provides peace of mind for riders on the go. Following the trend of sustainability, an increasing number of people are opting to ride their bikes instead of driving their cars to work. To cater to these bikers, we offer an innovative solution for their locking needs.

Product Description

SecuriSeat is an innovative locking device that utilizes the core component of a bicycle, the saddle, in securing the bike with a specialized retractable cable that is incorporated to the underside of the seat's shell. Covering this coiled cable is a resolute lock box designed for further protection featuring a 4-digit combination lock. Our product combats the problem of bicycle and accessories theft by providing a long cable that encompasses the entire bike, without the hassle of keys or weight of current bike locks, perfect for an active rider.

Overall Business Goals

Establish a reputable Brand Image: Building a marketing campaign to differentiate SecuriSeat from competitors, and ensuring a durable product by performing various quality tests.

Create value for investors*:* Proposing an attractive and revenue-generating project through honest and extensive marketing, we communicate the multi-faceted argument that our product surpasses typical new product standards.

Reduce Environmental Impact*:* Using recyclable materials in manufacturing and packaging our product to achieve sustainability, gaining approval and support from our environmentally conscious consumers.

Marketing

Our marketing strategy is committed to promoting our product and generating awareness for our target segments. Through extensive research of the industry, surveys, and interviews, we have meticulously developed an integrated marketing strategy plan targeting frequent bikers with a household income above $50,000 and over the age of 18 living in urban or suburban environments. Using various push and pull tactics, we will communicate the benefits of the SecuriSeat and differentiate ourselves from competitors. By using a consistent brand image

throughout all mediums of advertising, we hope to generate awareness and create demand in our target markets.

Our distribution Channel strategies were determined by the bicycling retail environment since 51% of dollar sales in our industry come from specialty bike stores. Our product is priced based on customer purchase intent while also taking into account revenue maximizing price and our competitor's prices.

Operations Management

By extensively researching individual suppliers both domestically and abroad, we have assured the rationale behind each supplier selection. The same energy went into selecting materials and processes, considering costs relative to the levels of quality we perceived.

Our headquarters are in Salt Lake City, Utah, among many other established sporting goods companies. Utah offers a lower corporate tax rate, vast industry-specific skilled worker pool, and lower utilities costs.

Information Systems

We choose the most suitable ERP systems for our company by analyzing the benefits and shortcomings of each. Additionally, determining key performance indicators and utilizing analysis software, is integral to observe aspects such as the success of our online marketing campaign or website strategies employed. Using information systems to gather high quality and relevant data will assist the company in making better educated assertions and therefore decisions.

Finance

In our base case scenario, we foresee profitability of all for our stakeholders with a strong NPV of $479,995 and an IRR of 36%. We require $1,379,722 for our initial startup cost, asking investors to contribute 75% of capital and friends, family and management of the company to contribute the remaining 25%. These percentages reflect ownership in the company as well. With a low cost of goods sold we have high margins to work with and develop our company.

INTRODUCTION

SecuriSeat

The SecuriSeat is a bicycle seat with a built in retractable bike chain and lock. To lock the bike, a consumer pulls the chain out of the seat, wraps it around the bike wheels and frame, and returns the end of the cable back into the back of the bike seat. This ensures that the entire bike is secure. To un-lock, a pre-set 4-digit combination must be entered into the padlock. The seat is universally compatible and easy to install so bikers will be able to keep the same bike they've been using for years.

This solves the problem of bike or bike part theft. Unfortunately no matter how important your bike is to you, it will often be the target of bike theft. No one wants to replace a stolen bike, so it is important for a rider to invest in a bicycle lock. However, the standard bike lock leaves some parts of the bicycle vulnerable, such as the seat or wheels.

Our value proposition contains three main elements. The first is the 6-foot cable chain which encompasses the entire bike, including wheels and frame, ensuring total security. The second is that our 4-digit combination lock, which removes the need to remember a key. Third is the incorporation of lock into the seat, completely eliminating the need to carry around a heavy lock every time the bike is used.

Current Trends

Across the United States, there is a push towards healthier living, sustainability, and more effective modes of transportation (source). Bicycling provides an active, fun, and easy way to get from place to place. It also reduces emissions put into the environment by removing cars from the road. Overall the bicycle industry observed steady growths of at least 0.2% per year since the 2000 (source-gluskin). The National Bicycle Dealers Association notes that "there are approximately 45 million adult "cyclists" today, and cycling ranks fifth on the list of most popular outdoor recreational activities."[1] As bicycle usage increases, opportunities arise for new product development, which is where the SecuriSeat comes in.

To respond to the "go-green" trend, SecuriSeat has developed corporate social responsibility initiatives. We reduce our environmental impact by using recycled materials in SecuriSeat

[1] "A Look at the Bicycle Industry's Vital Statistics." *NBDA*. Web. 24 Nov. 2014. <http://nbda.com/articles/industry-overview-2013-pg34.htm>.

production, as well as recycling old bike seats. Responding to consumer trends is important if our company plans to thrive in the future. We must cater to customer values.

Industry

Our product falls under the bicycle, bicycle parts, and bicycle accessories industry. Because our industry includes such a wide range of products, we face stiff competition. Although we are a bike seat, we will also be competing with companies producing full bicycles, helmets, bike locks, bicycle specialized apparel, etc. Companies popular in the US include Trek, Specialized and Redline however, the majority of goods are produced overseas. These foreign companies such as Giant and Bianchi, create even more difficulty for a small start-up to succeed. According to the National Bicycle Dealers Association, the bicycle retail industry declines by 1,000 dealers annually while also generating as many start-up's per year. However, NBDA warns that there is a slim profitability in the bicycle industry because start-up owners are often bicycle hobbyists, not business people. Since our company consists of a hybrid of both, we believe we have the expertise needed to be successful in this market.

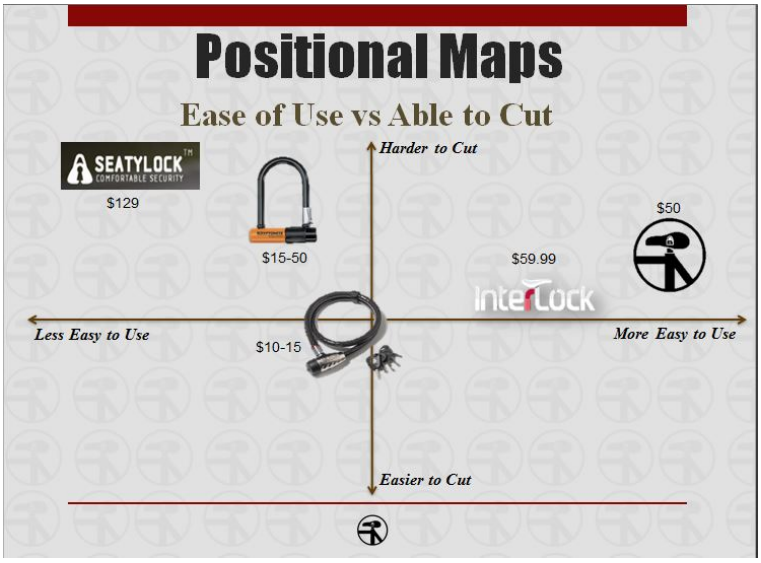
Competitor Analysis

Upon entry into the bicycle industry we will be facing two main competitors, the SeatyLock and the InterLock. By conducting research on consumers of our industry and analyzing our competitors differentiating characteristics, we were able to position ourselves in a newly defined market. The SecuriSeat is an all-encompassing secure bike lock with a sleek, comfortable design. It provides a peace of mind that no other product in this industry can match.

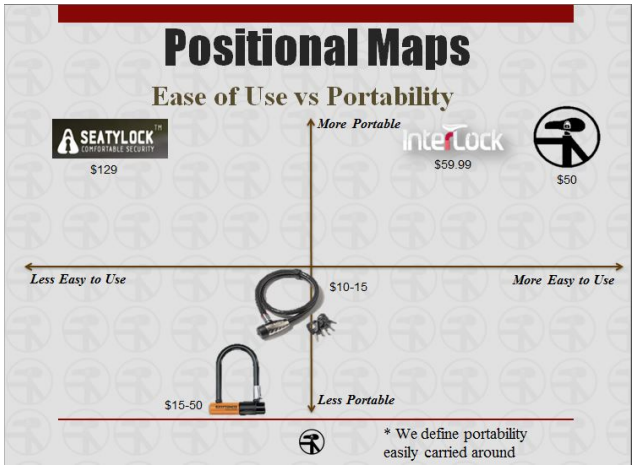
To differentiate ourselves, we have created the following positional maps to assist in our marketing

				
	U Lock	**Cable Lock**	**SeatyLock**	**Inter Lock**
Key Benefits	Made of thick steel. Hard to cut. Efficiently deters theft.	Lightweight. Varying lengths, can wrap around entire bike. Varying chain thickness.	Bike seat unfolds into a lock. No need to carry a separate bike lock. Difficult to cut.	No need to carry separate bike lock. Convenient.
Price Point	$15 - $50	$10-$15	$129	$59.99
Disadvantages compared to *SecuriSeat*	Heavy, not easy to carry around. May require keys. Short chain, requires careful bike positioning.	May require keys. Needs to be carried around. Gets tangled.	Must detach and reattach seat every use. Requires keys.	Needs to be assembled by customers. Short chain. Requires keys.

strategy.



When comparing with competitors, we



decided to evaluate ourselves based on the ease of use of the lock. We examined is by comparing the time and effort required to perform the tasks

Corporate Social Responsibility

We believe in not only producing high quality products, but also supporting and giving back to the community. With this in mind, we have selected two initiatives that reduce our impact on the environment and give back to those in need.

Our company strives to be sustainable by carefully choosing the raw materials that go into our product, taking into account the environmental impact it may create. Bicycle seats are made of various materials, and unfortunately, some of which are not easily recycled or reused. While exploring different options for raw materials, we were pleased to find a sustainable alternative, recycled polyethylene foam. By using recycled materials, our company saves natural resources, energy, and money[2]. Moreover, we will affiliate with All Packaging Company, which uses recyclable materials for packaging[3]. We believe this will gain the appreciation of our customers since it corresponds with our customer's values, as many bicyclists are environmentally conscious.

Not only did we want to be viewed as a sustainable company, but also as a philanthropic foundation. We will do so by offering customers the option of donating their old bike seats after they have purchased a SecuriSeat. Instead of throwing the old seat, we want to encourage our customers to donate it to the International Bike Fund. This nonprofit organization aims to promote sustainable transportation and keep bikes out of landfills around the country. Their Directory of Youth Bicycle/Bicycle Recycling Programs page lists hundreds of programs across the nation, encouraging biker to donate and support their cause[4]. We will encourage retailers that sell SecuriSeat to have collection bins for customers' old saddles. To create incentive for customers to donate, they would receive a discount towards their purchase if they donate to a program.

We hope that through these initiatives, we will enhance our brand image as a humanitarian and environmentally conscious company.

[2] "Buying Recycled Products." *Stanford.* Web. 24 November 2014. <http://bgm.stanford.edu/pssi_5rs_buying_recycled_products>.
[3] "Focused on your needs and on the environment." *All Packaging Company.* Web. 24 November 2014. <http://www.allpack.com/Environmental.php>.
[4] "Directory: Youth & Young People Bicycle Programs." *International Bicycle Fund.* Web. 24 November 2014. <http://www.ibike.org/encouragement/youth-directory.htm>.

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Because you have enough to worry about

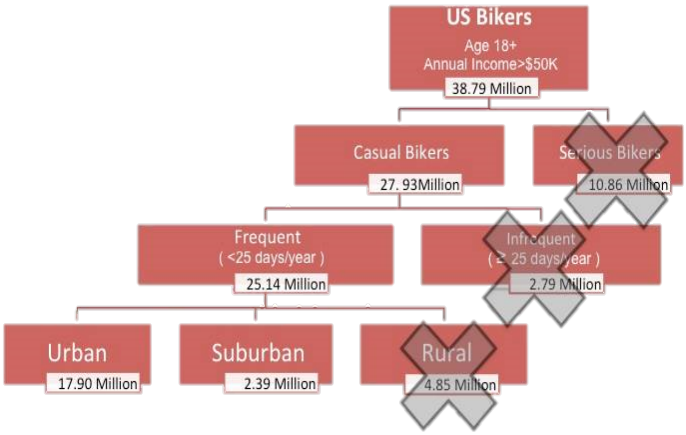
Objectives

As a small startup company, we recognize that creating a demand for our product is essential for success. Through financial sensitivity analyses, we found that demand is a key factor for determining our company's NPV. Therefore our marketing department is dedicated to increasing our revenues by achieving the following goals:

- **Expanding awareness** by implementing successful marketing campaigns. We hope to increase overall awareness by at least 1.5% per year.
- **Creating a strong brand image** by using a consistent voice and style throughout all of our advertisements. Our goal for the first five years is to be considered a brand in a biker's retrieval set when making the decision to purchase either a bike seat or a bike lock.
- **Reaching a wider audience** by increasing our ACV through building relationships with retailers. We expect to reach an ACV of 45% by year 5.
- **Utilizing online marketing** by maximizing the traffic to our website through various information systems tactics.

Market Segmentation

To determine which segments were most interested in our product, our company conducted focus groups, informal interviews, and online surveys. With this information, we went through various configurations of our segmentation tree before we finally settled on our current target markets [MK Exhibit 1]. Since our product is a bike accessory, we started with the entire biker population in the United States. We then added an age restriction of 18 or older because bikers under this age would not have the ability to purchase our product themselves. Through research, we found this number to be 59.67 million[5], growing by approximately 0.2% per year[6]. We also added an



MK Exhibit 1: Segmentation Tree

[5] "Statistics and facts on Cycling." *Statista*. Web. 22 November 2014. <http://www.statista.com/topics/1686/cycling/>.

annual household income restriction of above $50,000 because our product is a specialty good; those without a large enough discretionary income would not buy it.

To narrow down the segment size, we then took into account the psychographic characteristics of bikers. We divided the total US bikers into those that bike for casual purposes and those that bike competitively, or "serious" bikers. The serious biker segment was rejected after an interview with Landry's Bicycles store owner, Tom Henry[7]. We discovered that serious bikers do not have a need for a new bike seat because they buy custom-made seats for their racing bicycles in order to improve their performance. In addition, these bikers do not park their bicycles in public spaces and thus have no need for a bike lock.

After taking into account behavioral characteristics, we separated the casual bikers by how often they bike. Frequent bikers were determined to be those who biked over 25 days a year and infrequent bikers were those who biked fewer than 25 days a year. We chose to base this off days per year to account for seasonality. Through a focus group, we found that infrequent bikers were unwilling to pay for our product because they did not have a need for a bike lock. Therefore we rejected the infrequent biker segment[8].

Lastly, we divided the frequent biker segment by their geographic characteristics: urban, suburban, and rural. The rural segment was dropped due to the fact that it has a low risk of bike theft and therefore would not have a need for our product. We decided that the other two segments, urban and suburban, were to be our primary and secondary target markets, respectively.

Primary Target Segment: Frequent Bikers in Urban Environment

Our primary target segment consists of frequent bikers in an urban environment over the age of 18 with an annual household income of over $50,000. We estimated 17.9 million people within this target segment. We believe this group primarily consists of bikers that commute to work. We assumed that because they are in urban environments where corporate businesses tend to operate, these bikers are career-oriented, hardworking, and busy people [see MK Appendix 2 for full segmentation grid]. Because of their busy lifestyles, we will market the convenience of

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[6] Edmondson, Brad. "The U.S. Bicycle Market: A Trend Overview." *Gluskin Townley Group*. Web. 22 November 2014. <http://www.gluskintownleygroup.com/downloads/The%20US%20Bicycle%20Market%20-%20A%20Trend%20Overview%20Report.pdf>.

[7] Henry, Tom. Interviewed by Noah McAskill. Boston, MA. 28 Sept.2014

[8] Focus Group. Conducted by Matteo Bramani. Boston, MA. 6 Oct. 2014.

having a built in, retractable cable-chain lock in their bike seat. Time spent untangling typical cable chain locks or fidgeting with U-Locks would be saved through using a Securiseat.

Secondary Target Segment: Frequent Bikers in a Suburban Environment

Our secondary target segment consists of frequent bikers over the age of 18 with an annual household income of over $50,000 in a suburban environment. We determined this segment to be 2.39 million people. In terms of psychographic characteristics, we believe these people are family-oriented, environmentally aware and health conscious. Through our focus group, we observed that they primarily use their bikes for running small errands or for leisure activities with friends[9]. Because this segment does not use bicycles as often as commuters in our urban segment, we expect that they are not accustomed to carrying around a bike lock. When marketing towards this group, we will pitch the convenience our product offers, emphasizing that after installing SecuriSeat, they will never have to worry about forgetting their bike lock or keys.

Brand Image

As stated above, a main goal for our company is to provide a consistent brand image through all mediums of advertising. By using a uniform logo, slogan, and color scheme, we hope that it is easier for consumers to recognize our brand and our product.

Logo

We have created two different logos to symbolize our product. First is a text logo of our product name [MK Exhibit 2]. Second is a symbol logo of our product [MK Exhibit 3].

SECURISEAT

MK Exhibit 2: Name Logo

We designed the name logo to incorporate a front profile of a bicycle as the "i" from "Securi". This bike is chained to the next letter, "S" from the next word "seat". This chain not only symbolized how we created the name by combining "security" and bike "seat" but also demonstrates the function of our product right in the logo itself. Through this design, we hope that customers will find our logo interesting while also gaining an understanding of our product before they see it. In addition, when writing our

MK Exhibit 3: Symbol Logo

[9] Focus Group. Conducted by Matteo Bramani. Boston, MA. 6 Oct. 2014.

product name in plain text, we will capitalize the two "S", emphasizing the alliteration. The secondary symbol logo is a more simplistic representation of our product. It is a circle encompassing a bike seat with the image of a lock in it, highlighting the security of seat. In the first five years of marketing we will use both these logos so consumers associate our brand name and product together.

Slogan

We chose the slogan, *"Because you have enough to worry about"*, as it embodies the solution our product provides to bikers. It emphasizes that customers will ***never*** have to:

- Worry about leaving their bike lock at home
- Worry about forgetting the keys to their bike lock
- Worry about lugging around a heavy lock
- Worry about an uncomfortable bike seat

For examples of our slogan in use, see MK Appendix 3&4 for our magazine advertisements.

In addition to our slogan, we also use the tagline, "*Save your bike*" to remind our customers to protect their bikes from theft by locking their bikes up, preferably with our SecuriSeat. This slogan is more frequently used in our advertisements as it is more concise and easier for consumers to remember. Furthermore, because it is shorter, it fits better on advertisements that are limited in space such as online banner ads [MK Exhibit 17] or bus ads [MK Exhibit 12].

MK Exhibit 4: Website Tagline

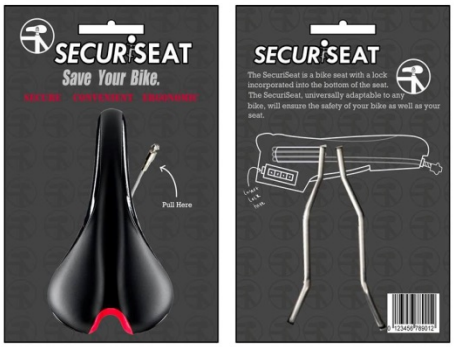
Color Scheme

Aside from our logos and slogans, we have also created a brand color scheme. We will use white, grey, black and red in all of our advertisements with a simple and elegant design. We often use grey backgrounds with black/white text and use red for emphasis. We chose these colors considering the greys to represent the color of concrete, black the color of asphalt, white the color of road lines and red the color of brick walls; all of these aspects are found in the urban environment. By having a common color scheme, we expect it will be easier for people to remember our product so that we can achieve our goal of becoming a considered a brand in a biker's retrieval set and eventually into their evoked set.

Packaging

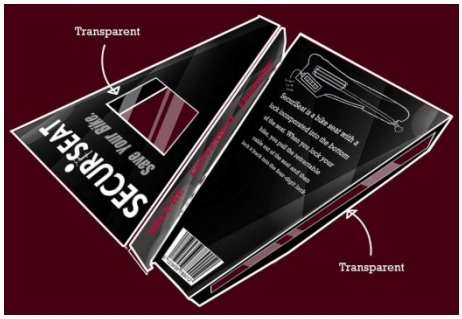
Our packaging has been separated into in-store packaging and online shipping packaging. For both packaging designs, we used consistent theme explained above. The front is a simple, incorporating just our logos and tagline and the back has a short description and blueprint design of our product.

The in-store packaging is simply a thick piece of cardboard with two slits in which the seat rails will fit through and we will zip tie them from the back. Though this is a typical packaging technique for bike saddles, it also benefits our product because in-store browsers will be able to access the retractable cable lock. To entice customers to try our product, we indicated a "Pull Here" text on the packaging design [MK Exhibit 5]. This aspect demonstrates the benefit that our product has above other bike locks because it highlights its multi-functionality.



MK Exhibit 5: In-Store Packaging

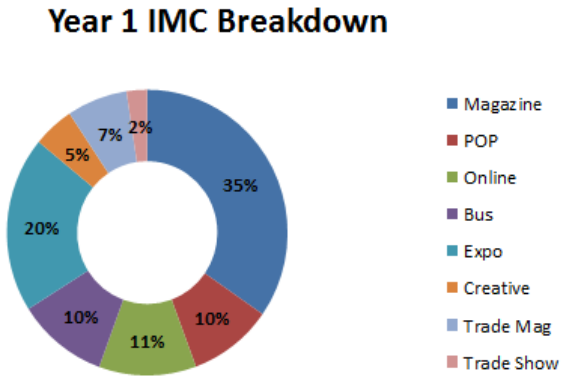
The online packaging consists of a triangular shaped, cardboard box which will enclose the product to ensure it does not get damaged during shipping. However, we designed a clear, plastic window on the top and side of the box to allow customers to view the actual product.



MK Exhibit 6: Online Packaging

Integrated Marketing Communications Plan

The biking industry is highly specialized with several brands already well-established. Consequently, when a customer is buying a bike product, it is highly likely that they would end up purchasing from a leading bicycle brand. Therefore it is vital for our company to generate awareness in order to create a demand for our product. To accomplish this, we will allocate at least 10% of our fixed costs to marketing expenses each year [see MK Appendix 22]. With the funds, we decided to

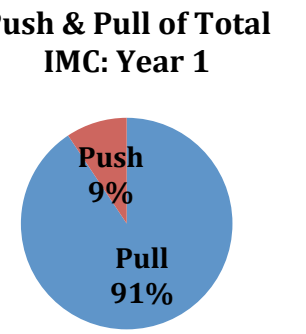


MK Exhibit 7: IMC Breakdown

focus on promoting our product through magazine ads and exhibiting at events as we believe these to be most effective to generate awareness in our industry [MK Exhibit 7]. For a full IMC schedule, see MK Appendix 4.

Pull Strategy

The pull advertising portion of the IMC schedule is where awareness is generated. For this reason, we will budget a majority of our marketing expenses towards it. At least 91% of our entire marketing budget will be allocated towards pull advertising each year [see MK Exhibit 8]. Our pull strategy includes magazines, online and bus ads, exhibition attendance, as well as word of mouth and press releases. When generating WOM awareness, we assumed the SecuriSeat is a public product as passersby would see our product when our customer's bikes are chained on public bike racks. For a detailed five year WOM forecast, see MK Appendix 24. Our company chose not to advertise on billboards, radio or television in the first five years because as a startup, we would not have sufficient funds and it is unlikely for our type of product would be heard/seen on these mediums.



MK Exhibit 8: Push vs. Pull

Magazine Advertisements

Year 5	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total Cost	CPM	TM1 Awarenes	TM2 Awarenes
Bicycling Magazine													$ 57,435	$ 49	1.12%	3.91%
Bicycle Times Magazine													$ 14,000	$ 117	0.09%	0.60%
American Bicyclist													$ 6,000	$ 87	0.07%	0.23%
Fitness													$ 640,320	$ 153	2.46%	8.61%

MK Exhibit 9: Magazine Awareness

Our magazine ads were strategically placed in magazines geared towards casual bikers, which includes both our target markets. Though several alternate magazines may have gained more impressions, they were geared specifically towards professional racers and hence would not generate large awareness for our target markets. Another consideration in placement of our magazine ads was the seasonality in biking activity. We put heavy emphasis on placing our ads in summer editions, specifically during the June and July. We believe this to be when the most people will be biking. Additionally, we included one ad in the spring, when biking season begins, and one in the fall, when people are going back to school or preparing for the holiday season [MK Exhibit 9].

Starting in year 1, we decided to place ads in *Bicycling Magazine* and *Bicycling Times Magazine* as they are specific to our product and likely to generate a decent amount of awareness in our target markets. *Bicycling Magazine* was more expensive as it has a greater established reader base with circulation of about 425,000[10]. Since this was our primary magazine, we chose to run full page ads in 4 editions each year. Adjusted for the percentage of people in our target markets, awareness was calculated to be 1.12% for our primary target market, urban bikers, and 3.91% for our secondary target market, suburban bikers [MK Exhibit 9]. Because *Bicycling Magazine* is a specialized magazine, there was a relatively low cost of $14,359 per ad and only $49 of cost per thousand.

Our second magazine, *Bicycling Times Magazine*, is significantly smaller, with a circulation of only 30,000 and cost per ad of just $3,500[11]. Because the cost was so low, it was cost efficient to advertise in this magazine. Each of these ads would be a full page and would produce an awareness of 0.09% for our urban segment and 0.6% for our suburban segment. Though the awareness generated is less than that of our primary magazine, we still opted to pay for it since the total cost was only $14,000 with a CPM of $117, which is still within our acceptable range[12].

In year 4, we added another specialty bike magazine, *American Bicyclist*. This magazine is similar in size to *Bicycling Times* with a circulation of 25,000 and low cost per ad of $1,500[13]. The addition of this magazine improved the awareness of our urban segment by 0.07% and 0.23% for our suburban segment. Though this was not a significant increase, we still wanted to invest in this magazine because the total cost of 4 ads only totaled $6,000 with a CPM of $87.

We also wanted to appeal to a wider range of our target market with a more generic sporting magazine. However, we struggled to find one that offered a reasonable price per ad since our funds are limited. For example, we considered magazines such as *Sports Illustrated, ESPN,* and *Men's Health* but the costs were extremely high. For a ⅓ page ad, the CPM of these magazines far exceeded our acceptance range of $150. The only magazine we found that best suited this criterion was *Fitness Magazine.* We would only advertise in this magazine in year 5

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[10] "2015 Media Planner." *Bicycling*. Web. 22 November 2014. <http://images.rodale.com/acc/bic/BI15_MediaKit.pdf>.

[11] "Bicyce Times Media Kit 2015." *Rotating Mass Media*. Web. 22 November 2014. <http://www.rotatingmassmedia.com/bicycle-times-media-kit/>.

[12] We defined an acceptable range for CPM to be any cost under $150.

[13] "2014 Media Kit American Bicyclist." *The League of American Bicyclists*. Web. 22 November 2014. <http://bikeleague.org/sites/default/files/2014ratekit.pdf>.

because that is when we expect our company to be better established and earning steady revenues. To reduce costs but maintain a high impact, we decided to use ½ page ads at $98,490 cost per ad[14]. Though costs are much greater than the specialized biking magazines, it generates a high awareness of 2.46% in our urban biker segment and 8.61% in our suburban biker segment. Because this is a dramatic increase from our primary magazine, *Bicycling Magazine,* we justified a CPM of $153, only $3 above our range.

Point of Purchase

We have opted to use point of purchase advertising displays in the various independent retailers that we expect to accept our product. We assumed only small retailers will allow our POP display to be set up in their stores as larger chain or mass merchandisers save their floor space for more powerful brands. Our POP display will be used in years 1-4, but will be removed once we enter mass-merchandisers in year 5 [see full IMC plan in MK Appendix 4].

The display design consists of a full sized bicycle featuring our product as well as a plastic bike rack to simulate those used in public but without the cost or the weight. In addition, on the side of the display, there will be a poster stand containing brochures. The poster displayed will be informational, showing our logo and highlighting the key benefits of our product. The brochures provide a more in-depth description of the SecuriSeat [see MK Appendix 12 for our brochure]. It also provides information regarding our CSR initiatives which we hope will increase our customer's willingness to buy the product. From surveys, we estimated that each initiative would increase our purchase intent by about 1% [MK Appendix 15]. To cover the cost of creating these displays, we have allocated $20,000 of our marketing expenses towards this medium to generate 1% awareness in each of our target markets.

MK Exhibit 10: POP Display

[14] "Mission Statement." *Fitness.* Web. 22 November 2014. <http://www.meredith.com/mediakit/fitness/2013%20Fitness%20Media%20Kit.pdf>.

The benefit of our point of purchase advertising display is to allow customers to have a hands-on experience with our product. It is important for customers to be able to try out the bike seat to test its comfort and also visualize how the SecuriSeat is a unique and innovative solution to their biking needs. Specifically, we want potential buyers to recognize that our product's sleek design will not affect the appearance of their bike. Moreover, we want the customers to notice the length of the cable chain and its ability to wrap around not only the bike frame, but the front or back wheel as well. Lastly, we want the customers to test out the retractability of the cable lock, to understand that the mechanism saves time, works smoothly, and is easy to use.

Bus Advertisement

Year 1-2	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total Cost	CPM	TM1 Awareness	TM2 Awareness
Transit/bus													$ 21,600		0.65%	-
Year 3-5	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total Cost	CPM	TM1 Awareness	TM2 Awareness
Transit/bus													$ 43,200		1.296%	-

MK Exhibit 11: Bus Awareness

In addition to magazine advertisements, we decided to use bus ads in the top 6 biking cities according to Bicycling.com[15]. These cities include New York City, Seattle, Chicago, Portland, San Francisco and Minneapolis. Since these cities are well spread out across the United States, we believe they are representative of the diverse biking population. We chose to invest in bus ads because they are located in urban environments where our primary target segment resides.

Each of these ads would be on a bus traveling around the city for an entire month, specifically May, when a significant amount of people are outdoors and likely see our ads. Each advertisement costs $3,600 for one month per bus, which leads to a total of $21,600 for six buses for six cities monthly[16]. Because we only

MK Exhibit 12: Bus Ad

[15] "America's Top 50 Bike-Friendly Cities." *Bicycling*. Web.22 November 2014. <http://www.bicycling.com/news/advocacy/america-s-top-50-bike-friendly-cities-0?slide=10>.
[16] "Bus Advertising and Bus Stop Shelter Advertising – Bus Ads in 200 Markets." *BlueLineMedia*. Web. 23 November 2014. <http://www.bluelinemedia.com/bus-advertising>.

use this technique in cities, we only generate awareness for our primary target segment of 0.65% starting in year 1 [MK Exhibit 11]. For an example of this ad, see MK Exhibit 12.

In year 3, we increased our expenses to include an additional month of bus advertising. We decided that September was most appropriate, as many students are going back to school during this time and parents are busy buying school supplies in the city. We maintained six buses per city and used the same cities. This doubled our total cost to $43,200 and increased awareness to 1.3%.

Exhibitions

Pull Events	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total Cost	CPM	TM1 Awareness	TM2 Awareness
Bike Expo NY													$ 9,939		0.59%	0.80%
InterBike													$ 15,114		0.91%	1.21%
Outdoor Retailer Summer Market													$ 11,414		0.68%	0.91%
Philly Bike Expo													$ 4,541		0.27%	0.36%

MK Exhibit 13: Expo Awareness

We recognized that expos are a very important aspect of a marketing strategy, especially for startup companies. Many people attend expos to explore the new products in the industry. We consider these people to be the early adapters we are looking for in the introduction stage of our product's life cycle. Also, because the bike industry is very specialized, events are held throughout the year at various locations within the United States. We will be attending four major bike expos including Interbike, Outdoor Retailer Summer Market, the Philadelphia Bike Expo, and Bike New York [MK Exhibit 13].

Giveaways

MK Exhibit 14: T-Shirt Design

At every event, we will hold giveaways such as T-shirts with our SecuriSeat logo [MK Exhibit 14]. We plan on creating these shirts on Customink.com and will be handing out 350 at each event for a cost of $1,586[17]. In addition, there will be raffles where the winner gets to take home a free SecuriSeat. Participants will sign up at our booth to be entered into the raffle and winners will be announced on our website every 3 hours starting at 12pm the day of the event. By announcing winners on our site, we expect greater awareness to be generated online. When signing up for the raffle, the attendees will voluntarily give us their contact information which will allow us to be able to contact them in the future.

[17] *CustomInk.* Web. 23 November 2014. <http://www.customink.com/designs/securiseat/44807121-15087306/sdfu/?pc=SDFU-58793&cm_mmc=sdfu-_-Winter2014-_-Day2Mtv-_-preheader1>.

This way, we are targeting those who are already interested and aware of our product. Since each SecuriSeat sells for a retail price of $45, this results in an opportunity cost $135 per day at each event. However, this will provide valuable word of mouth advertising as these people will be the first few to use our product.

Other promotional costs for the expos included pamphlets, business cards, and fliers. The costs for 5000 of these units are $657, $379, and $603 respectively[18]. For samples of these, see MK Appendix 11 and 17. After acknowledging the large size of these events, we decided that printing fliers will assist in directing those interested towards our booth. Furthermore, we included a QR code for customers to easily access our website.

MK Exhibit 15: Expo Booth

Expo Booth Design

Our booth was designed with simplicity in mind [MK Exhibit 15]. We incorporated our product's logos as well as color scheme in hopes that this will resonate with potential customers. The main focus of our booth is the full size set-up, including a working bicycle and bike rack, for customers to try our product. This set up is very similar to our POP display and therefore the same benefits apply. In addition to the interactive display, we will have two additional stands. The main stand is to hand out brochures and take down raffle information. The second stand is solely to display our product and to provide in-depth information of our product through conversations with an employee. We purchased corner booths if the event permitted because this creates additional space and attracts more attendees.

Interbike

Our main focus will be on the Interbike event in Las Vegas on September 16-18th. Interbike is the world's largest annual gathering of the Bicycle Industry in North America and will therefore reach the greatest amount of target customers. It also serves as a good opportunity for networking within the industry. Interbike listed that last year in 2013, over 26,000 people attended their event[19]. The cost for a standard 10ft x 10ft booth at this event is $2,325, and we

[18] *PFL*. Web. 23 November 2014. <http://www.printingforless.com/>.
[19] "Why you should attend Interbike." *Interbike*. Web. 23 November 2014. <http://www.interbike.com/attendee/why-attend.htm>.

decided to purchase a "Total Reach New Exhibitor Package" for an additional $3,350[20] [see Appendix 18]. This package will help us reach a wider audience in a crowded event where people may not have the chance to stop by our booth. Awareness generated from this event totaled 0.91% for the primary, urban segment and 1.21% for the suburban segment [MK Exhibit 13]. After including all the promotional activities listed above, as well as travel and lodging expenses for our workers, the total cost for Interbike is $15,114. See MK Appendix 26 for in-depth calculations.

Outdoor Retailer Summer Market Expo

The Outdoor Retailer Summer Market Expo is held in Salt Lake City, UT and will take place on August 5-8th. In 2013, 28,000 people attended this event[21]. The cost for a booth at this expo is listed at $3,150[22]. Similar to the Interbike, we chose to purchase a "Total Reach: Product Launch" package for a cost of $4,320. Since this event is in Salt Lake City, close to our headquarters, we do not have to pay significant travel expenses. We calculated the total cost for the Outdoor Retailer Summer Market to be $11,414, generating awareness of 0.68% and 0.91% in our primary and secondary segments respectively.

Bike NY

We also plan on exhibiting at the Bike New York Expo on May 1st & 2nd. This is the largest cycling event in the northeast with attendance well over 60,000 each year[23]. Our goal for attending events is to ensure we reach a wide variety of customers. To do this, we want to cover as large range of geographical area as possible. Since the first two expos targeted the West Coast, these next two cover the East Coast. We estimated similar costs to the other expos though this event has higher travel costs as it is farther from our headquarters. A corner booth at the New York Expo costs $2,625.

To further increase the awareness of our product, we will order 5,000 units of lanyards (customized with SecuriSeat Logo) for attendees to wear and take home. We are investing in lanyards because this is a free and public event. Being free to attend, we believe there will be

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[20] "Interbike Exhibitor Information." *Interbike*. Web. 23 November 2014. <http://www.interbike.com/static/pdf/IB15_Early_Bird_Contract-AK_forms_F.pdf>.
[21] "Show Overview." *Outdoor Retailer.* Web. 23 November 2014. <http://www.outdoorretailer.com/summer-market/show-info.shtml#>.
[22] "2014 Summer Market Exhibit Space Contract." *Outdoor* Retailer. Web. 23 November 2014. <http://www.outdoorretailer.com/static/pdf/SM14_Exh_Contract_-_DN.pdf>.
[23] "Be a part of Bike Expo New York." *Bike New York*. Web. 23 November 2014. <http://www.bikenewyork.org/wp-content/uploads/2014/10/Expo-Booth-Sell-Sheet-20151.pdf>.

more casual riders than the other specialized biking events and therefore include a larger majority of our target segments. This venture would cost us $2,690 and generate an additional 0.16% and 0.22% awareness for our primary and secondary segment respectively. Overall, the costs totaled $9,939 and awareness generated is estimated to be 0.60% for the urban segment and 0.80% for the suburban segment.

Philadelphia Bike Expo

Lastly, we will attend the Philadelphia Bike Expo held on November 8th& 9th. This is the smallest of our events, with a listed attendance of only 3,000 people in 2012. We chose this expo because it reminds customers of our product in the fall/winter season since our marketing strategy is focused on the spring/summer. This exposition is much smaller compared to the other events so we will not be printing fliers for it, saving around $600. However, because the event is so small, there is a very casual environment we hope to use to build a stronger relationship and reputation with customers.

The total cost of the Philly Bike Expo came out to $4,541, including the free t-shirt and SecuriSeat giveaways, pamphlets and papers listed above, as well as travel and other expenses. A standard booth for this event costs $1,225 and comes with the basic set up including a pipe, drape, table and two chairs[24]. Attending this event improved our awareness by 0.27% for the urban segment and 0.36% for the suburban segment.

Out-of-the-Box Idea

We will be hosting our own annual SecuriSeat event starting in year 3 with plans to grow each consequent year. This is a family friendly event for bikers of all levels. It will be held in Antelope Island State Park in Northern Utah. We have chosen to hold the event in this state park due to the abundance of bike paths and beautiful lake views[25]. The campsite we will be renting for the event is located by the lake and costs $160 per day[26]. The site allows a maximum of 80 people and includes 5 picnic tables as well as a tented area [MK Appendix 16]. However, as the size of the event increases, we will need to relocate to a larger campsite.

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[24] "2014 Exhibitor Registration." *Philadelphia Bike Expo.* Web. 23 November 2014. <http://media.wix.com/ugd/d0ad61_c2b4b7294b834a71a92e504199bbbc77.pdf>.

[25] "Antelope Island State Park." *Utah State* Parks. Web. 23 November 2014. <http://stateparks.utah.gov/park/antelope-island-state-park>.

[26] "Antelope Island State Park, UT." *Utah State Parks*. Web. 23 November 2014. http://utahstateparks.reserveamerica.com/camping/Antelope_Island_State_Park/r/campsiteDetails.do?contractCode=UT&siteId=35671&parkId=343031

The main event consists of a bike-a-thon in which participants race on a pre-determined course in the park. Along this path will be activity stations in which participants will get the chance to use the SecuriSeat to perform a variety of tasks. An example of a task is that we will create an obstacle of bike racks and the participant will need to use the SecuriSeat to lock the bike to each of these racks. This way, they will experience benefits of our product firsthand. There will be three winners and they would each receive their own SecuriSeat to take home. Aside from this main race, there will also be events for children as well such as face painting sessions and scavenger hunts.

The event would start at 3pm and wrap up with a barbeque at the main camp site. Catering will be provided by Pat's Barbecue, an award winning chef located in Salt Lake City, Utah[27]. The barbeque would start at 6:30pm and we will order three meats and side dishes to cater to vegetarians. [MK Appendix 20]. We have prepared about $2,600 for catering including tax. We have also prepared around $660 for promotions including 2,000 fliers to post around town and 80 t-shirts for the event. We also allocated $200 for miscellaneous supplies such as flags and duct tape to mark the trails, poster board, and face paint. See MK Appendix 26 for cost break down.

MK Exhibit 16: Press Kit

Public Relations

As a small startup company, we have limited funds to spend on marketing. Therefore, we will utilize resources, such as public relations to help establish brand awareness.

We have found several potential websites, blogs, and magazines, which we believe are suitable for promoting SecuriSeat. Each of the following has corresponding themes and ideas we want to associate with our company. They also feature products similar to the SecuriSeat. The PR magazines we have chosen are *Sports Illustrated* and *ESPN Magazine*. The blogs we hope to be mentioned on are all bike centered, with many enthusiasts visiting their pages. These blogs include Bike Snob NYC, Lovely Bicycle and Bike Pretty. Other websites we hope to be featured on include Buzzfeed,

[27] *Pat's*. Web. 23 November 2014. <http://www.patsbbq.com/>.

Redkiteprayer, Bikehacks and Copenhagize. These websites focus on new and exciting trends and products in cycling [see MK Appendix 25 for number of followers].

Our company will contact each of these bloggers or magazine companies and ask if they would be interested in promoting our product. In this message, we would kindly ask for their address in order to ship them a customized press kit. This package includes a personal thank you letter from our CEO, SecuriSeat T-shirt, lanyard, business card, informational brochure and most importantly, their own SecuriSeat [MK Exhibit 16]. By giving them their own product, they will be able to write realistic reviews and provide our company with native advertising. We invest $10,000 each year for the creation of these kits, hoping to generate 1% awareness in each target segment. Kits would be sent out in April, June and September, months we believe biking is most active [see MK Appendix 4 for IMC schedule].

Online

MK Exhibit 17: Online Advertisement

Online advertising is a vital part of our marketing strategy. Our surveys, interviews, and research suggested that a bulk of our target segments would be exploring online for information and ultimately purchasing the SecuriSeat online as well [MK Appendix 1]. Since our target market includes people between the ages of 18 and 54, we know this group spends a large amount of time browsing the internet for entertainment, work, and other purposes. Therefore, one of our Key Performance Indicators is to measure the effectiveness of our online marketing strategies [see IS section for further details].

Ideally, we want to create attention-grabbing banner ads, increase our search engine optimization through effective keywords for Google Adwords, and promote our product on sites such as Buzzfeed and Facebook. The costs of online advertising are challenging to calculate precisely, since it often depends on the number of views or clicks to our website. As a result, we assumed that online advertising will be approximately 15% of our total pull advertising costs. This came out to be $23,354 starting in year 1 and reaching $168,500 by year 5. Awareness generated online starts at 1% and grows steadily each year, ending with 7% in each target segment by year 5 [MK Appendix 8].

The ad portrays our name in very large letters, as well as our slogan [MK Exhibit 17]. Since our ad is animated, we believe it will be entertaining and interesting enough to get viewers

to glance at it and hopefully, be curious enough to click on it and come to our website. To measure the effectiveness of our ad, we will be using Klipfolio, Google Adwords and Moz software to collect specific data on impressions, click-through-rates, conversion rates and more. However, the primary criteria we will be looking at is the conversion rate or the amount of people who see our ads and ultimately end up buying a SecuriSeat.

Push Strategies

Year 5	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total Cost
PUSH													
Trade Magazine:													
Bicycle Retailer & Industry News													$ 14,380
Trade Shows:													
Health and Fitness Business													$ 6,047
IBD Summit													$ 2,990
GlobalShop													$ 1,890
Push TOTAL													**$ 25,307**

MK Exhibit 18: IMC Push

As stated in our objectives, our company is determined to make our product available on a wide scale. To do this, we start building relationships with retailers at an early stage, beginning in year 0. We will be attending trade shows such as IBD Summit, GlobalShop and Health and Fitness Business. In addition, we will be advertising in the trade magazine, *Bicycle Retailer & Industry News* [MK Exhibit 18].

Trade Shows

We will be attending the IBD Summit on January 27-29 in Tempe, Arizona[28] as well as the GlobalShop convention on March 24-26 in Las Vegas[29]. The IBD Summit is catered toward the cycling community and goes hand-in-hand with the Interbike convention. We benefit from attending this summit because it is an opportunity to learn about the issues our industry face and to gain insight into solutions for those problems. We will also be able to network with others from similar companies to gather information and build relationships. The total cost for attending this event is $2,990.

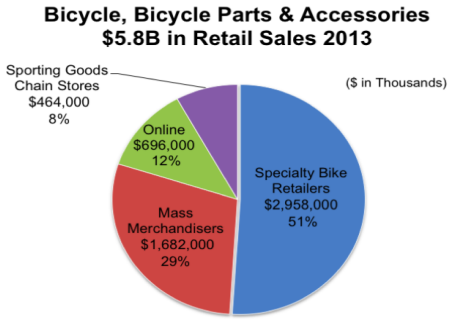
[28] "Summit Overview." *The IBD Summit.* Web, 23 November 2014. <http://www.theibdsummit.com/summit-info.htm>.
[29] "GlobalShop 2015." *Design:Retail Network.* Web. 23 November 2014. <http://www.globalshop.org/>.

The GlobalShop convention is tailored for large retail companies and provides our company with a chance to learn about improving our retail strategy. To cover the registration travel, and lodging expense for this event, we have put aside $1,856 per year.

In year 5, we will begin attending the Health and Fitness Business Expo also held in Las Vegas, on September 10-11[30]. This event is also hosted by the same company as the IBD Summit and Interbike, Emerald Expositions. Unlike the other two events, in this expo, we will be exhibiting our product. This allows our company an opportunity to demonstrate our product and gain awareness within the industry, hopefully gaining interest from retailers. We will devote $6,047 towards this event each year.

Trade Magazine

Aside from attending trade shows, we will also be promoting our product in the *Bicycle Retailer & Industry News* trade magazine. This magazine has a circulation of 9,000 and costs $3,595 per ad[31]. We will use full page ads shown 4 times a year for a total cost of $14,380. By advertising in a trade magazine, we hope that our product will reach a wider range of independent retailers. According to the National Bicycle Dealers Association, there are approximately 5,000 independent bicycle retailers throughout the United States[32]. Since these specialty retailers consists of over 50% of the industry, this is where the majority of our revenue will be coming from. Therefore we want as many retailers to be aware of our product as possible [MK Exhibit 19].



MK Exhibit 19: Bicycle Industry Breakdown

Channels and Pricing

Distribution Channels

The Bicycle, Bicycle Parts & Accessories Industry is broken down into online, specialty bike retailers[33], mass merchandisers, and sporting goods chain stores [MK Exhibit 19]. To find the breakdown of these channels, we looked at the Industry Overview provided by the National Bicycle Dealers

[30] *Health+Fitness Business*. Web. 23 November 2014. <http://www.healthandfitnessbiz.com/>.
[31] "2015 Media Kit." *Bicycle Retailer and Industry News.* Web. 23 November 2014. <http://www.bicycleretailer.com/sites/default/files/downloads/page/2015_MediaKit_sm.pdf>.
[32] "Want to start a bike shop?" *NBDA*. Web. 23 November 2014. <http://nbda.com/articles/want-to-start-a-bike-shop-pg70.htm>.
[33] We use "specialty bike retailers" and "independent retailers" interchangeably.

Association[34]and Statista[35]. For full ACV calculations, see MK Appendix 28.

ACV by Channel	Year 1	Year 2	Year 3	Year 4	Year 5
Online	12%	12%	12%	12%	12%
Mass Merchandisers	0%	0%	0%	0%	8%
Specialty Bike Retailers (Independent)	12%	22%	23%	24%	24%
Sporting Goods Chain Stores	0%	0%	0.4%	0.5%	1.1%
Total ACV	24%	34%	35%	36%	45%

MK Exhibit 20: ACV

Years 1-2

During the first two years, we will only be distributing our product through independent bike retailers as well as online through Amazon.com. Despite independent stores taking such a high margin of 50%, we still believe the SecuriSeat should be sold at these retailers. Because they are independent, the owners have direct control of which products to sell in store. We found that these owners are most likely bicycling enthusiasts and would therefore be very interested in a new and innovative product such as the SecuriSeat.

We will pursue online selling through Amazon.com, the 9th largest US retailer according to Fortune[36]. From our surveys, we found that a majority of our target segment expect to find our product online or research the product online before buying. Moreover, online constitutes 12% of the Bicycle Industry, the second largest channel. Therefore, we want to ensure that our product is available online for the convenience of our customers.

Year 3-4

Once we are established and show steady profits, mass merchandisers and chain stores will be more willing to carry our product. Beginning in year 3, we plan to enter into chain stores, specifically Sports Authority, to supplement our distribution in online and independent stores.

While we will pursue all chain retailers, we assumed that the largest retailer will not be willing to work with us yet. We chose Sports Authority because it was in the middle range, accounting for about 9% of the chain store channel[37]. Thus we felt it was feasible that they would be willing to carry our product. Upon visiting a Sports Authority store, we saw that they sold a

[34] "Industry Overview 2013." *NBDA.* Web. 23 November 2014. <http://nbda.com/articles/industry-overview-2013-pg34.htm>.
[35] "Segmentation of the US bicycle market in 2013, by channel of trade." *Statista.* Web. 23 November 2014. <http://www.statista.com/statistics/255620/trade-channels-within-the-bicycle-market-in-the-united-states/>.
[36] "Amazon ranks among retail's 10 biggest companies for the first time." *Fortune.* Web. 23 November 2014. <http://fortune.com/2014/07/01/10-largest-retailers-amazon/>.
[37] "Major Companies." *IBIS World.* Web. 23 November 2014. <http://clients1.ibisworld.com/reports/us/industry/majorcompanies.aspx?indid=1009>.

wider variety of products than specialty biking stores. However, they had a significant and separate section exclusively for bicycles and accessories, which is where our product would be placed. By offering an assortment of sporting goods, we can expect more people to see our product when browsing and become aware of it even if they are not in our target segment.

In year 4, we will increase ACV because we assumed Sports Authority will raise their store penetration rate and carry our product in 70% of their stores as opposed to the 50% in year 3. In addition, we suspect that largest chain store, Dick's Sporting Goods, will accept our product and begin selling it at 50% of their stores. However, because chain stores only account for 8% of our industry, this change only increased our ACV by 1% from year 3.

Year 5

Lastly, in year 5, we will finally attempt to enter the mass merchandisers. The reason we held this off is because independent stores constitute the majority of our revenue but when we enter mass merchandisers, this will be reduced due to further channel conflict.

In our first year in the mass market, we suspect only Target will be willing to accept our product as it is not the largest retailer but still comprises 8% of the market [see MK Appendix 28]. Since our product is a specialty good, we do not believe mass merchants will provide the correct atmosphere to sell our product. Our survey results support this claim as limited people expected to see this product in such stores. With the introduction of Target in year 5, total ACV only rose slightly by 9% [MK Exhibit 20].

Pricing Strategies

Year 5	% Manf Total Units	Total Units	Manf Selling Price	Retailer Margin	Retailer Selling Price
Specialty Bike Retailers (Independent)	53%	127202	$22.50	50%	$45.00
Online	26%	63057	$29.25	35%	$45.00
Sporting Goods Chain Stores	2%	5796	$21.04	45%	$38.25
Mass Merchandisers	18%	42038	$20.25	40%	$33.75
Total Unit Sales		238092			
Avg Weighted Selling Price			$23.85		$42.85

MK Exhibit 21: Pricing

Online & Independent

Our pricing strategy is based off our customer's willingness to pay. We obtained this information through the conduction of surveys, in which the majority of people indicated they would expect our product to be sold for a price within the range $40-$50. We also took into account the price that would generate the greatest revenue. Through a demand curve analysis, we

found our revenue maximizing price for our primary segment to be $45 and for our secondary segment to be around $46 [see MK Appendix 13 for our demand curve analysis]. Assuming the SecuriSeat is sold at these prices, we calculated purchase intent of 20.49% and 17.17% in our primary and secondary segments respectively. Since our primary segment, urban bikers, consists of a considerably larger amount of people than suburban bikers, we decided to price the SecuriSeat at a full retail price of $45. We will sell online exclusively through Amazon, offering them a manufacturer price of $29.25 as their margins are 35%[38] [MK Exhibit 21]. Furthermore, we assumed independent stores have margins of 50%, resulting in our manufacturer price of $22.50.

Chain Sporting Goods

Retail selling prices will change starting year 3 when our company enters the chain sporting goods stores. Based on analysis of competitors and other companies within the industry, we concluded that chain stores would demand a 15% decrease in retail selling price from independent retailers[39]. This results in a reduced retailer price of $38.25 in chain stores. After a chain margin of 45%, our manufacturer selling price will be $21.04.

Mass Merchandisers

In year 5, we will enter the mass market. Since these stores offer great discounts for their customers, we assumed a 25% decrease in price. Thus our product will be sold at $33.75 in these stores. After assuming a margin of 40%, the manufacturers selling price comes out to $20.25.

Because of the lowered prices in Chain and Mass retailers, independent stores will not be willing to compete and would therefore drop our product. To account for this, we adjusted for a channel conflict. In year 3, we remove 20% of demand. In year 4 and 5, we removed 30% and 35% respectively.

To compensate for the loss of ACV from independent stores, we will target chain stores that make up a majority of the chain store dollar sales, Sports Authority and Dick's Sporting goods. Together, they make up 24% of the channel [see MK Appendix 28 for detailed analysis]. The loss will also be mitigated simply because only a small percentage of our sales come from

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[38] "Selling on Amazon: Pros and Cons." *PracticalEcommerce.* Web. 23 November 2014. <http://www.practicalecommerce.com/articles/2928-Selling-on-Amazon-Pros-and-Cons>.

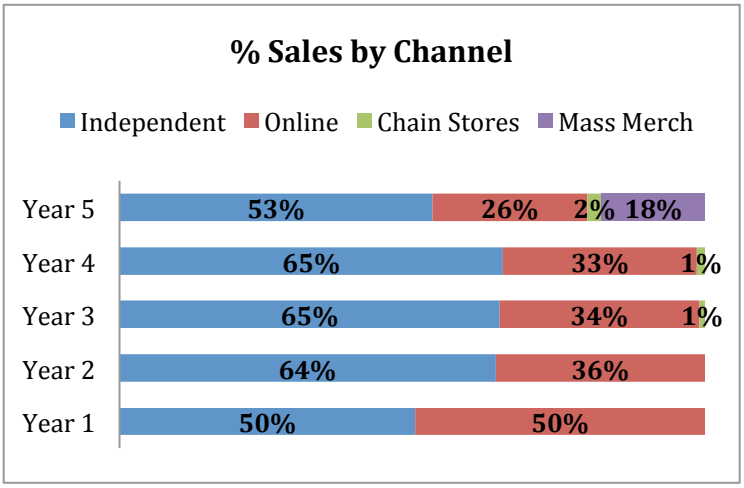
[39] "Industry Overview 2013." *NBDA.* Web. 23 November 2014. <http://nbda.com/articles/industry-overview-2013-pg34.htm>.

chain and mass merchandisers. MK Exhibit 21 reveals that only 2% of our sales come from chains and 15% from mass merchandisers.

Sales Volume by Channel

Our sales volume per channel was greatly determined by the profile of the retail environment shown in MK Exhibit 19. Because it showed that specialty retail stores make up 51% of the market in the bicycle industry, our marketing strategies were designed to reflect the volume of these sales in each channel.

Through examination of the unit sales by channel breakdown in MK Exhibit 22, it is evident that the independent and online retailers comprise the majority of sales. Starting in year 1, independent stores will account for 50.5% of sales. By year 5, they will account for 53% of sales or more than 127,000 units [see MK Appendix 27 for breakdown in units]. With this in mind, we focused our efforts on independent stores. We plan to keep manufacturers' representatives throughout all five years in order to manage the huge number of independent stores as well as utilize their skills and experience.



MK Exhibit 22: % Sales by Channel

Online sales begin at 49.5% of total sales units in year 1, but slowly decrease to 26% in year 5. However, it still remains our second largest channel as expected from survey results. To monitor this change, online marketing is one of our key performance indicators. The strategies used to maximize our online presence are outlined in detail in the Information Systems section.

Chain retailers and mass merchandisers remain a small portion of our sales units, with chain stores remaining under 5% of sales volumes in all 5 years, and mass merchandisers making up only 15% of sales in year 5.

Sales Force

To determine whether or not our company should hire our own sales force, we performed an in-depth comparison between the cost of an in-house sales force and the costs of outsourcing

manufacturer's representatives [MK Exhibit 23]. We considered not only the monetary benefits, but also additional factors such as experience, access to important decision makers, and coverage of the market.

As discussed above, we plan to utilize manufacturers' reps in all five years. We will pay them the standard 10% commission on manufacturer's selling price per unit. This will be cost effective for our company in the first few years as we do not have to pay them full salaries. Also, we assumed they will have valuable experience and knowledge of the industry that we do not yet have. They will be able to use their previously established connections to promote our product and gain quicker entrance into the market. Moreover, they will also have a greater incentive to sell our product since their salary is solely based off the commission they earn. In the first year, we estimate a cost of $74,709 for outsourcing manufacturers' reps [MK Exhibit 23].

OUT OF HOUSE					
Cost for manufacturers reps (10% of manufactuer selling price per unit)	$ 74,709	$ 209,669	$ 227,309	$ 227,130	$ 282,004
IN HOUSE					
Cost for own salesperson ($75,000+commission 2% of sales)	$ -	$ -	$ 75,658	$ 75,888	$ 94,178
Marketin Vp cost	$ 105,000	$ 106,575	$ 108,174	$ 109,796	$ 111,443
Total In-House	$ 105,000	$ 106,575	$ 183,831	$ 185,684	$ 205,621
Total Marketing Salaries Cost	**$ 74,709**	**$ 209,669**	**$ 411,140**	**$ 412,815**	**$ 487,625**

MK Exhibit 23: Sales Force

After the first two years, we would hire our own salesperson to supplement our manufacturers' representatives. Our sales force will work alongside the current reps initially to gain experience and knowledge. The manufacturers' reps focus on maintaining relationships with existing independent retailers and also expanding into more independent stores. Our newly hired sales force will focus on building relations with the chain stores and mass merchandisers we plan to enter in years 4 and 5.

The advantage of having our own sales force is that they will be able to focus solely on promoting the SecuriSeat, whereas manufacturers' reps may divide their time between multiple products. In addition, by training our own employee, they will be extremely knowledgeable of our product to answer any concerns our customers may have. We plan to pay each sales person a base salary of $75,000 plus an additional 2% commission on sales. We estimate that our sales person would be required to work 275 hours. We based this calculation on the assumption that

he/she will work 38 weeks a year, 35 hours per week, and spend 28% of their time on personal selling. One salesperson is able to handle 372 hours of personal selling. Thus, we would only need to hire one in-house salesperson throughout the first five years.

Sales Projections

Base Case

When forecasting the demand, we split the two target markets, as they had significantly different population size, purchase intent and awareness. Each segment was calculated separately then added together to create total demand. Calculations for our base case can be seen on MK Exhibit 24.

Sales Projections: Base Case		
Year 1	Urban	Suburban
Target Market	17,900,000	2,390,000
Purchase Intent	20.49%	17.17%
ACV	24.24%	24.24%
Awareness	6.30%	9.79%
Trial Rate	0.31%	0.41%
Trial Households	56,015	9,741
Units @ Trial	1	1
Demand	56,015	9,741
Competition Adjustment	-	-
Total Units	56015	9,741
Avg Weighted Manufacturer Selling Price to Channel	$25.84	$25.84
Manufacturer Sales	$ 1,447,519	$ 251,734

MK Exhibit 24: Base Case Year 1

Through research, we found that the biker population grows 0.2% each year, according to Gluskin Townley Group's analysis of the US Bicycle Market[40]. For that reason, we adjusted our target market sizes each year to reflect this. Additionally, because our product is a one-time purchase, we subtracted those who bought the SecuriSeat from the previous year.

From our surveys, we calculated purchase intent taking into account the 80/30 rule[41]. This resulted in purchase intents of 20.49% and 17.17% in urban and suburban segments respectively. It does not change through the years because we retain the same selling price. In addition, awareness differed between the target markets due to the difference in segment population sizes as well as the difference in IMC methods used.

Other assumptions included one unit at trial and zero repeat rate because once a person buys a seat, that person will no longer have a need for it and will not need to buy another one in the future. We considered that a person might buy additional SecuriSeats as gifts. However, we

[40] Edmondson, Brad. "The U.S. Bicycle Market." *Guskin Townley Group.* Web. 23 November 2014. <http://www.gluskintownleygroup.com/downloads/The%20US%20Bicycle%20Market%20-%20A%20Trend%20Overview%20Report.pdf>.

[41] Assume 80% of "Definitely Buy" and 30% of "Probably Buy" will actually buy.

realized that the people they gifted it to would also be in our target markets and therefore would simply count as a new customer, not affecting repeat rate.

Lastly, we adjust for competition beginning in year 3 once we enter chain retailers and eventually mass merchandisers. Examining our industry, we assumed loss due to competition of 20% in year 3, 30% in year 4 and finally 35% in year 5. For a full five year sales forecast, see MK Appendix 30.

Optimistic Case

OPTIMISTIC	$ 2,098,208	$ 5,270,754	$ 5,919,423	$ 5,791,914	$ 8,643,741
% Difference from BASE	23%	46%	54%	52%	54%

MK Exhibit 25: Optimistic vs. Base

The optimistic case varies from base case due to adjustments in awareness and ACV. For changes in awareness, we altered the largest part of the IMC plan, the magazines. Instead of the base calculation of 4 impressions, we assumed that we would be able to gain awareness from only 3 impressions. This increased overall awareness by 7.69%

We also altered ACV by making assumptions on which stores would accept our product. In the base case, we entered into Sports Authority in year 3, and then added Dick's Sporting Goods in year 4. For our optimistic case, we assumed we would be able to enter both, Sports Authority and Dick's in year 3, adding REI in year 4. We also changed our mass merchandiser from Target to Walmart, as they have the greatest share in the market. This resulted in an overall rise in ACV of 13.93% in year 5. MK Exhibit 25 presents the impact of these changes on the revenue compared to Base Case. For the complete optimistic case sales forecast, see MK Appendix 31.

Pessimistic Case

PESSIMISTIC	$ 1,231,898	$ 3,093,176	$ 3,058,531	$ 2,979,435	$ 3,872,805
% Difference from BASE	-28%	-14%	-21%	-22%	-31%

MK Exhibit 26: Pessimistic vs. Base

To keep a consistent analysis, we adjusted the same variable as the optimistic case. Awareness was altered with the assumption that it required 5 impressions to generate awareness opposed to the 4 impressions in the base case. This caused an overall awareness decrease of 5.26% in year 5.

Similarly, ACV was adjusted based on the different stores we would be entering. In the pessimistic scenario, we assumed that we would only be able to enter REI, the lowest market share, in year 3, and no other chain stores. We also assumed mass merchandisers stay the same as base case. The result of these changes was an overall decrease in ACV of 8.85% in year 5. MK Exhibit 25 presents the impact of these changes on the revenue compared to Base Case. For complete pessimistic case sales forecast, see MK Appendix 32.

SECURISEAT

Because you have enough to worry about

Idea Generation

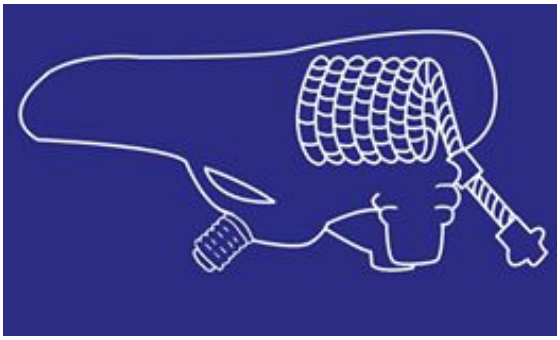
As the world around us is constantly changing, we notice a push towards healthier living, a greener environment and more effective methods of transportation. Consequently, in today's frenetic and fast-moving society, bicycling is becoming a preferred alternative to other modes of transportation. Overall the bicycle industry observed steady growth of at least 0.2% per year since the 2000.[42]A growing problem tied to this is an increase in bicycle theft and thus the necessity to securely lock bikes at all times. Through first-hand experience living in an urban environment, we are well aware of the dangers of theft.

Our original idea of the SecuriSeat stemmed from these thoughts. We saw the need for a product that would protect your entire bike, including frame, wheels and seat. Additionally, people are facing time constraints with busy schedules, and therefore the product should aim to be more convenient. As car owners have peace of mind locking their cars easily and securely, bike owners should have the same access to this opportunity. Incorporating a security mechanism into the bike itself somehow would achieve this functionality. After considering many options, we determined the seat as the core of bicycles, being an essential and universally interchangeable part.

Design Process

Design 1

In our first design we focused mainly on putting a lock within a seat, without considering the feasibility and functionality of the working parts. OM Exhibit 1 shows how we simply placed a cable beneath the seat, but later discovered design and aesthetic problems.

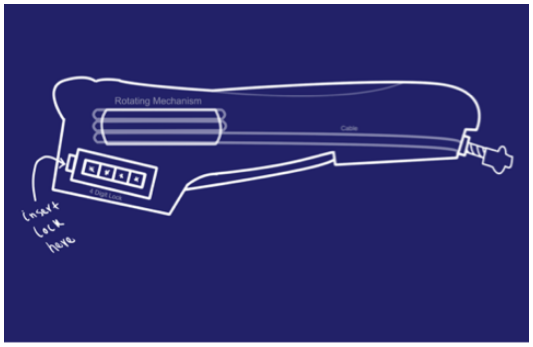


OM Exhibit 1: Design 1

All final components were present, but we did not understand how they would integrate or fit beneath the seat. This design included suspension springs that we thought would give the seat nice bounce and comfort. This was not feasible as there would be no room for a lock box under suspension springs, and the cable chain could not be located in the core of the seat. Also

[42] Edmondson, Brad. "Bicycling Trends, 2000-2010." *The US Bicycle Market: A Trend Interview* (2011): 4. Web. 23 Nov. 2014 <http://www.gluskintownleygroup.com...Report.pdf>

from customer feedback and interviews with the owner of Landry's Bicycles, we gained insight that customers wanted a sleeker seat, and therefore sought ways to make the seat more compact.



OM Exhibit 2: Design 2

Design 2

The second design would be geared towards ease of manufacturing. The lock would be in a more accessible location and there would be no suspension springs blocking the lock box. The cable itself would be pulled out of the front of the seat as it would be wrapped around the front wheel of the bike. The problem with this design was related to our cable retracting device placement. We did not realize that the mechanism could not be placed high in the shell without sacrificing serious durability as this would not allow enough space for sufficient shell plastic. x

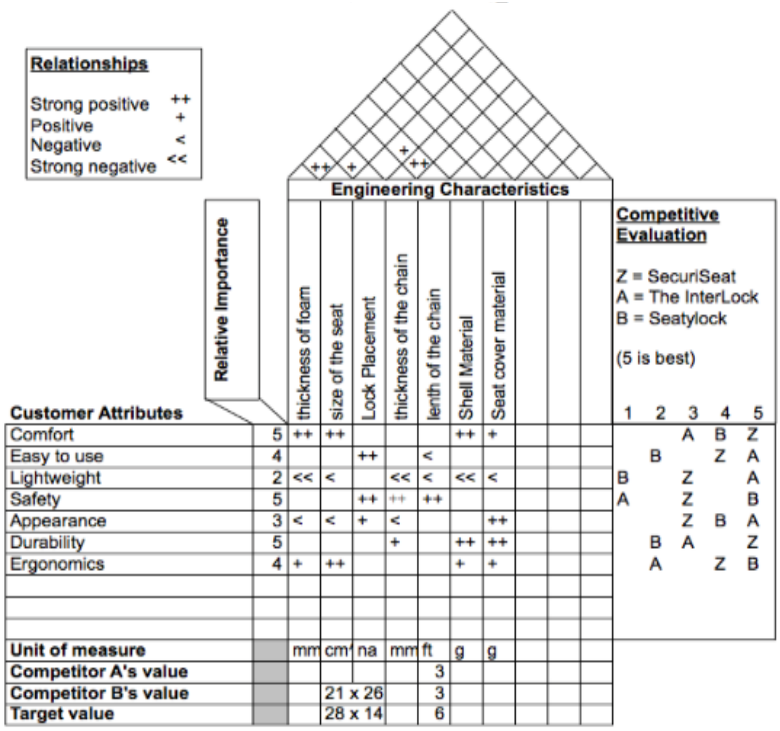
Design 3

After going to the design workshop and consulting with engineering students, we discovered many potential alterations. First was that we needed a torsion spring to serve as our cable retracting part. They helped us determine more practical dimensions of materials and better placement of parts. Instead of feeding the cable through the nose of the seat, we let the end of the cable hang freely from the lock box under the saddle. This eliminated excess material from the nose of the saddle and mitigated the risk of chafing riders with the end of the cable.

OM Exhibit 3: Design 3

Meeting Customer Requirements

Balancing customer requirements and engineering characteristics we found early on in the project would take careful consideration as well as a few trade-offs. After reviewing our House of Quality we identified safety, comfort/ergonomics and durability to be our top customer requirements.



OM Exhibit 4: House of Quality

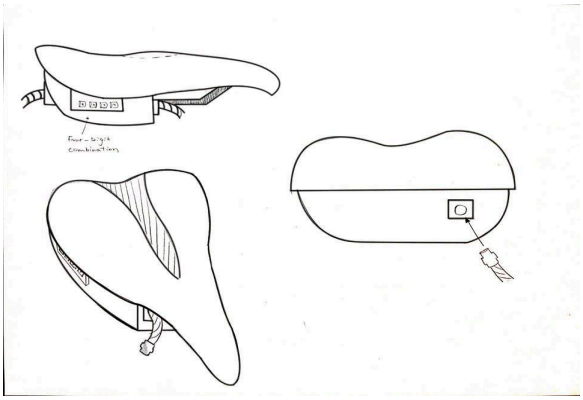
Customer Requirement: Safety

Lock Box

Safety was the most important attribute valued by customers as shown in the House of Quality. The lock that we use is made of braided strips of kevlar--the strongest metal used in cable locks--covered in nylon. It locks via four-digit combination, solving the problem of forgetting keys. The cable is wound by torsion spring, which is affixed to the underside of the saddle. This unit is protected by our lock box that is made with the same plastic as the saddle but with an additional 25% more carbon fiber for added security. Bike thieves typically snip cable chains at the ends of the cables; covering these ends with the lock box prevents thieves and lessens likelihood of Securiseat equipped bikes being stolen.

Chain Dimensions

Another trade-off we faced was the length and thickness of the cable versus security. There is a direct correlation between the length and thickness of a cable chain and its perceived safety. We tried several combinations before reaching the



OM Exhibit 5: Chain Design

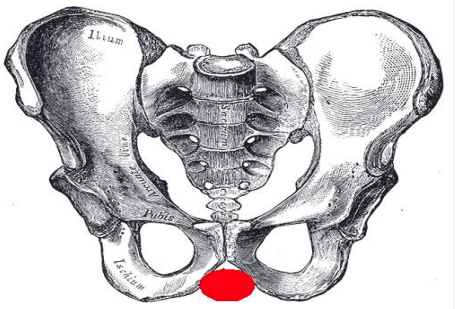
optimal one. A thicker cable would be difficult to fit in the lock box, yet also raises customers' levels of perceived security. A thinner cable would be easy to coil inside the lock box, yet lowers customers' levels of perceived security. Length of the chain faced the same trade-off. We tested manufacturability by buying a similar cable chain and coiling it under our prototype lock box. Working with these engineering constraints, our optimal cable dimensions came out to be six feet long and seven millimeters thick.

Lock Placement

Also mitigating the risk of theft is lock placement. Our combination lock is small and subtle. With this in mind, placing the combination slightly more out of view, in the shadow of our seat's edge, lessens the chance that a bike thief will tamper with the cable and hassle with the bike altogether.

Customer Requirements: Comfort and Ergonomics

Comfort and ergonomics dominated our surveys as two similar qualities customers wanted in our product. Since the customer sits on the actual seat component of the product, making sure it was up to par with customers' standards was an integral influence in design. Although the lock is the product function we are selling, a comfortable seat would differentiate our seat from competitors. In the House of Quality, building a larger seat, using thicker foam, and providing a durable shell and seat cover were the engineering characteristics positively correlated to comfort [OM Exhibit 4].



OM Exhibit 6: Pelvic Diagram

Seat Size vs. Foam

Consumers associate comfort with the idea that bigger is better, but the seat we envisioned was one with a unique, modern and sleek silhouette. Building a larger seat would not maintain our vision. To compensate for this trade-off, we maximized the foam. We selected a closed-cell recycled polyethylene based foam that does not lose its shape or consistency over time. Closed-cell foam molds to heat and pressure, absorbing weight and then evenly distributing it, similar to the way memory foam

works. [43] Its greater density and lower number of air bubbles gives it a non-absorbent quality allowing it to last longer.[44]

Center Cutout

Another way to mitigate the risk of having an uncomfortable seat is by reflecting health conscious designs into the seat's surface. If a seat cannot relieve pressure in the center of the saddle, harmful stress is put onto the body. Saddles today are designed to undercut this issue with concavities or compressions in the center of the seat where bone and muscle pressure occurs. [45] Men experience especially painful nerve compression as well as stoppages in penile blood flow with due to uncomfortable seats. These short term discomforts can lead to long term risks such as testicular cancer, infertility, and bone weakness. [46] To ensure our product stays clear of increasing these risks and rather, promotes a healthy and comfortable cycling experience, we are adding a cutout in our design.

Shell and Cover Material

Other factors having to do with the comfort factor of our seat are shell material and seat cover. The shell is made of carbon fiber nylon reinforced plastic, one of the most common materials in shell manufacturing. It is lightweight yet strong because of the added carbon fiber. We chose imitation leather to cover the seat, as it is the material that best withstands moisture, as well as other wear and tear, due to its plastic gloss and therefore has the longest life.

Costs

Meeting target costs was not difficult since our firm decided to do business overseas. The materials in our product were not too complex, nor needed much specialization with exception of the cable lock. For this reason, deciding to outsource our materials from China was a profitable decision.

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[43] "Elements of Comfort - Bicycle Seat Foam Padding." *Koobi.com.* N.p., n.d. Web. 23 Nov. 2014. <http://www.koobi.com/technology-bicycle-saddle-foam.html>

[44] "How Bicycle Seat is Made."*How Products Are Made.* N.p., n.d. Web. 23 Nov. 2014. <http://www.madehow.com/Volume-7/Bicycle-Seat.html>

[45] "The Four and A Half Rules of Saddles." Cervelo Cycles. N.p., n.d. Web. 23 Nov. 2014. <http://www.cervelo.com/en/...road-saddles-.html>

[46] "Cycling and Testicular Cancer." Livestrong.com. N.p., n.d. Web. 23 Nov. 2014. <http://www.livestrong.com/article/543018-cycling-and-testicular-cancer/>

Supplier Selection

Decisions concerning suppliers of raw materials were made using careful weightings of characteristics such as reputation, sustainability, certifications and price. Acknowledging risks in doing business internationally with longer lead times, less control over quality, and possible communication barriers, we elected suppliers that lessened our concerns. We have ten materials incorporated into our SecuriSeat: 55% and 75% carbon fiber reinforced nylon plastic, imitation leather, steel, torsion springs, a custom cable chain lock, closed cell foam, screws, staples and adhesive.

Plastic

The plastic saddle is the base of our product so finding a good fit to supply this material was pivotal. Xiamen Juyixiang Trading Co. was one of the frontrunners we found with 13 different types of specialized plastic lines. Connie Deng was our contact and worked with us in understanding our needs. She was upfront in disclaiming that the company's trading network did not extend into the US. At first we worried about this risk, but after extensive talks with her we reasoned developing new relations was an opportunity. The company has attained ISO9001:2008 quality management systems, SGS and ROHS certifications. The prices were extremely competitive and were excellent benchmarks for industry averages. She explained that a higher percentage of carbon fiber in the resins would equate to a higher price. For our plastic saddle and lock box we plan to use two plastics from this company, differing only in the degree of carbon fiber in each[47].

Foam

Changzhou Huayi Foam Company, Limited supplied the recycled, polyethylene closed-cell foam. The most attractive characteristic of the company was its wide selection. Originally we were not aware of the type of foam needed for a functional, comfortable bike saddle. The company provided consistencies that met our specific needs without having to pay premiums for custom. The waterproof features, processability, corrosion resistance, sound insulation, and recycled materials made them a clear choice. [48]

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[47] "Carbon Fiber Reinforced Nylon Plastic Resin." Alibaba.com. N.p., n.d. Web. 23 Nov. 2014. <http://www.alibaba.com/product-detail/carbon-fiber-reinforced-nylon-plastic-resin_1920753799.html>

[48] Mou, Eva. "Inquiry for Detailed Information of Raw Materials: Polyethylene Foam." Online Interview. 8 Oct. 2014. <evamou@huayifoam.cn>

Seat Cover

There were many leather suppliers to choose from for our seat cover, requiring extensive research. The leather is responsible for providing the encasing of the seat so finding a waterproof material was essential.[49] We decided to use Wenzhou Imitation Leather Company, Limited. The company rating and assessment report was done by TÜV Rheinland, a recognized, independent, neutral third party inspection company. Management certifications listed on the company profile website included ISO9001:2008, ISO14001 and OHSAS18001. Wenzhou Imitation Leather Company ensures quality and competitive prices additionally offering complementary features in its leather that no other companies we found did, such as flame resistance, hydrolysis lifespan, seam slippage and abrasion resistance pre-testing. They additionally boasted being one of the top 500 private manufacturers in China with 20 years in the PU leather industry[50].

Steel Bracket

The seat's shape is maintained by a steel bracket that surrounds the bottom of the saddle shell and connects to any bike. These brackets are usually made of steel, titanium, aluminum, magnesium, or carbon fiber. [51] Steel is the most widely used material as it is sturdy and appropriately priced. For suppliers we knew we wanted to ensure the deliverability--being our biggest, bulkiest and heaviest material--to our shipping location at the Shanghai port. We selected Shanghai JW Steel Company Limited, one of the top five steel mills in China, renowned for its customer service. Along with its reputation, it offers precision and unique steel cutting capabilities, matching packaging, as well as a two year warranty on all steel. Packaging consists of cardboard films that prevent scratching and rusting, tubes that encapsulate individual rods and painted oil applied to the rods. The company has visible copies of its quality management system certificate ISO9001:2000 and SGS certificates displayed on its website. Additionally it has had its product inspected by not just one, but several national and international third party companies such as TÜV Rheinland, Lloyd's, GL, SGS, BV, DNV, and CCS. [52]

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[49] "Elements of Comfort - Bicycle Seat Foam Padding." *Koobi.com.* N.p., n.d. Web. 23 Nov. 2014. <http://www.koobi.com/technology-bicycle-saddle-foam.html>

[50] Li, Helena. "Inquiry for Detailed Information of Raw Materials: Cover Leather." Online Interview. 7 Oct. 2014. <Helena@dtleather.com>

[51] "How to Buy a Bike Saddle." The Clymb.com. N.p., n.d. Web. 23 Nov. 2014. <http://www.theclymb.com/stories/buying-guide-item/how-to-buy-a-saddle/>

[52] Shu, Alan. "Inquiry for Detailed Information of Raw Materials: Steel Rods." Online Interview. 11 Oct. 2014. <alan@jwgroup.cc>

Cable

The main subassembly in our product is our cable lock. A company we contacted in the beginning of our research informed us that the specific cable lock we were looking for was not currently offered on the market. We contacted multiple cable lock suppliers and finally found one that would assemble a cable lock to our preferences. Hebei Ideal Bicycle Company was very responsive to our inquiries and open to negotiating a fairly priced custom 6-foot cable lock.

Torsion Spring

The subassembly in our product responsible for the retraction characteristic in our lock box is our torsion spring. Torsion springs are a fairly common, simple spring design used in retractable products such as dog leashes. Their ubiquity in US markets drew us to sourcing these domestically from a top supplier. All-Rite Spring Company is the leading manufacturer of American springs with over 60 years in the industry producing over 90 million custom springs[53].

Adhesive

Adhesive was the material we wanted to make sure not to overlook in the production process. Glues are somewhat similar and general across the market, yet for manufacturing, the most effectively applied and time efficient glue needed to be sprayable. 3M Foam Fast spray adhesive is a popular choice for similar foam, plastic and wooden materials that we will be using. We found a reliable, domestic supplier, Plustar Inc.. Established in 1978, it has been a distributor of adhesives focused on delivering a wider selection and shorter lead times. Additional ISO 9001:2008 and AS 9100 certifications verify this company's operations[54].

Screws

We decided to also source screws domestically because of their less complex nature and high availability in US markets. Also, the volume we'd be purchasing yearly would add astronomical shipping and handling costs if sourced overseas. MSC Industrial Supply Co. is a leading B2B metalworking company in the US and has strategically placed "Industrial Supply Customer Fulfillment Centers" across the United States. The center that we would be sourcing from would be the Nevada center, with guaranteed, next-day, standard delivery, which we are

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[53] "Inquiry for Detailed Information of Raw Materials: Torsion Spring." Online Inquiry. 7 Oct. 2014. <sales@allrite.com>

[54] "Inquiry for Detailed Information of Raw Materials: Adhesive" Online Interview. 15 Oct. 2014. <info@plustar.com>

willing to conservatively add two to three more days. Each and every center is certified with its own ISO 9001:2008 that demonstrates its internal processes are standardized nationally[55].

Staples

The final material we decided to source domestically were our staples. Like the screws, the simplicity of this material made us rethink researching international suppliers. One benefit of doing business with the company Screwerk is the amounts of commercial information available to buyers online. From prices, to stock levels and design recommendations they make on-site, the company offers high visibility which makes demand scenario planning much easier. [56]

Supply Chain

Inbound Shipping: International Suppliers

There are two parts of our inbound shipping. The first is international shipping from manufacturers in China to the Port of Long Beach, California. The second part is the domestic shipping from Long Beach to Salt Lake City.

Because our materials require different sized packaging and also weigh drastically different amounts, a big consideration was finding a shipping company that could handle our collection of materials and ship it for low prices. We chose to use a third party logistics company called Yuan Cheng Group, the third largest logistics company in China, to carry the shipment from the manufacturers to Shanghai and Shanghai to Long Beach. Through talks with the general manager of the international department, we realized that the port in Shanghai would be the cheapest and shortest route. Yuan Cheng Group would be responsible for picking up our orders from the five suppliers we have selected in Changzhou, Wenzhou, Shanghai, Xiamen, and Hebei and then transporting them to the port by truck. It would take them one or two days to get the materials to Shanghai.

Next, the shipment by boat across the Pacific Ocean would take approximately 21 days. Once in Long Beach, the shipment would need to be unloaded and inspected US Customs and Border Protection. We estimate that it will take at least four days to unload the container contents and pass through the inspection. As we are a start-up company with modest quantities of material to be shipped compared to other well-known companies, our materials will be towards or at the

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[55] "Inquiry for Detailed Information of Raw Materials:Screws." Online Interview. 13 Oct. 2014. <cust_service@mscdirect.com>

[56] Braam, Erik. "Inquiry for Detailed Information of Raw Materials: Staples." Online Interview. 10 Oct. 2014. <info@screwerk.com>

end of the Customs inspection line. The total time from suppliers through the end of inspection in Long Beach will come out to be approximately 35-40 days.

Through continuous communication and negotiations with Yuan Cheng Group, we agreed that based on the quantity of materials we would be shipping in year 1, they would decide what types and how many containers to use. We will then pay the negotiated price quote. Shipping costs would be calculated on a cost per ton basis [OM Exhibit 7].

The next step is to ship the material from the port to our facility in Salt Lake City, Utah. UPS Freight Truckload representative, Jennifer Campbell, gave us quote and estimated transportation time of one to three days to get to Utah. We decided that truck transportation although more expensive than train, would be more convenient and delivered specifically port-to-door.

Inbound Shipping: Domestic Suppliers

The four materials being sourced domestically will have less complex shipping processes. After ordering our specific material quantities from each supplier, order processing will occur at respective fulfillment centers across the US, and shipments will arrive within a maximum of three days after initial order placement.

Outbound Shipping: Finished Product

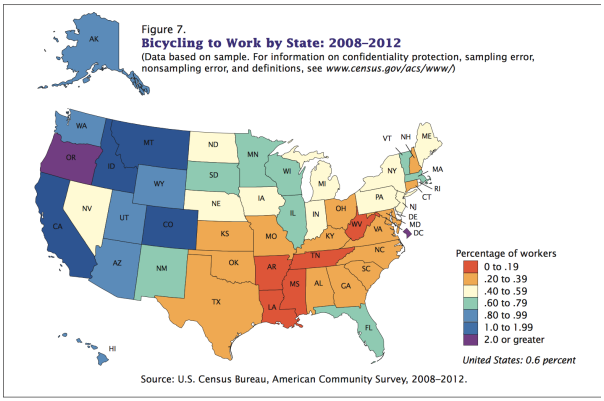
Once our product is fully manufactured, we ship the finished good to retailers in eight different cities: Chicago, New York City, San Francisco, Portland, Seattle, Minneapolis and Las Vegas to Amazon Distribution Centers. UPS would once again be the distributor to these cities. See following OM Exhibit 7.

Destination	San Francisco	New York	Portland	Seattle	Minneapolis	Chicago	Amazon Center
Lead Time (days)	2 to 3	8 to 9	2 to 3	2 to 4	4 to 5	4 to 5	1 to 2
Cost per 40 feet container	1,341	3,406	1,619	1,772	1,853	2,084	759

OM Exhibit 7: Outbound Shipping

Facility Location

Both our warehouse and operations will be located at: 2821 West Parkway Boulevard, West Valley, Utah. We utilized center of gravity and factor rating methods when deciding where to locate our facility. Additionally, we considered common data and information regarding our industry. The Census Bureau showed the largest population of bike commuters in the US is primarily concentrated in the West Coast [OM Exhibit 8]. Also, we found most American outdoor companies such as K2, Patagonia, and Black Diamond have headquarters and operations on the West Coast.



OM Exhibit 8: Bicycling Population

Center of Gravity

Initially, we calculated our center of gravity for suppliers and ended up in California, at the Long Beach Port. This occurred because our products from our material suppliers, located in China, will arrive at that port [OM Exhibit 9].

OM Exhibit 9: Center of Gravity

We then ran the center of gravity again, this time factoring in our consumers using the most bike friendly cities in the US. We calculated the longitude and latitude of each of these cities and weighted them based on their population. We also included the Amazon distribution center in Las Vegas. This resulted in latitude of 37.21 and longitude of 106.19, placing the facility in Southern Colorado [OM Appendix 3].

Taking note of the center of gravity's for both consumers and suppliers, we started looking into various states around this area of the country. After researching the states neighboring California and Colorado, we considered Utah as well after researching its low

corporate tax rate of 5%, its low cost of industrial real estate of $8.52 per square foot and finally cost of commercial electricity[57].

Regional Benefits

Another important factor driving our decision in considering Utah was the number of outdoor and bicycle companies located in the state. For example, companies such as Specialized, Rossignol, Salomon operate in Utah because of the skilled and educated work force available, the low cost of doing business and the ability to conduct conduct tests. This local industry presence gives us access to an established labor pool containing employees and experts in the field. [58]

Next, we computed a factor rating analysis. The factors that we considered in this analysis were: proximity to shipping port (LBP), cost of production labor, cost of industrial real estate, corporate income taxes and industrial electricity. The outcome of this analysis confirmed Utah as the optimal location for our facility.

Facility Specifics and Layout

The facility we selected is conveniently situated 0.4 miles away from highway 215. The facility is equipped with two docks and has a spacious parking area ideal for large truck access. In order to assure the security of our facility, we will install four surveillance cameras and two employee fingerprint accessible door locks. After measuring dimensions of our machines and subassemblies, we decided that 15,000 square feet could accommodate our operations. The lease of the facility costs $6,750 a month for a total annual cost of $81,000 a year. We will occupy 50% of the total building for the first five years, providing the company the opportunity to expand[59].

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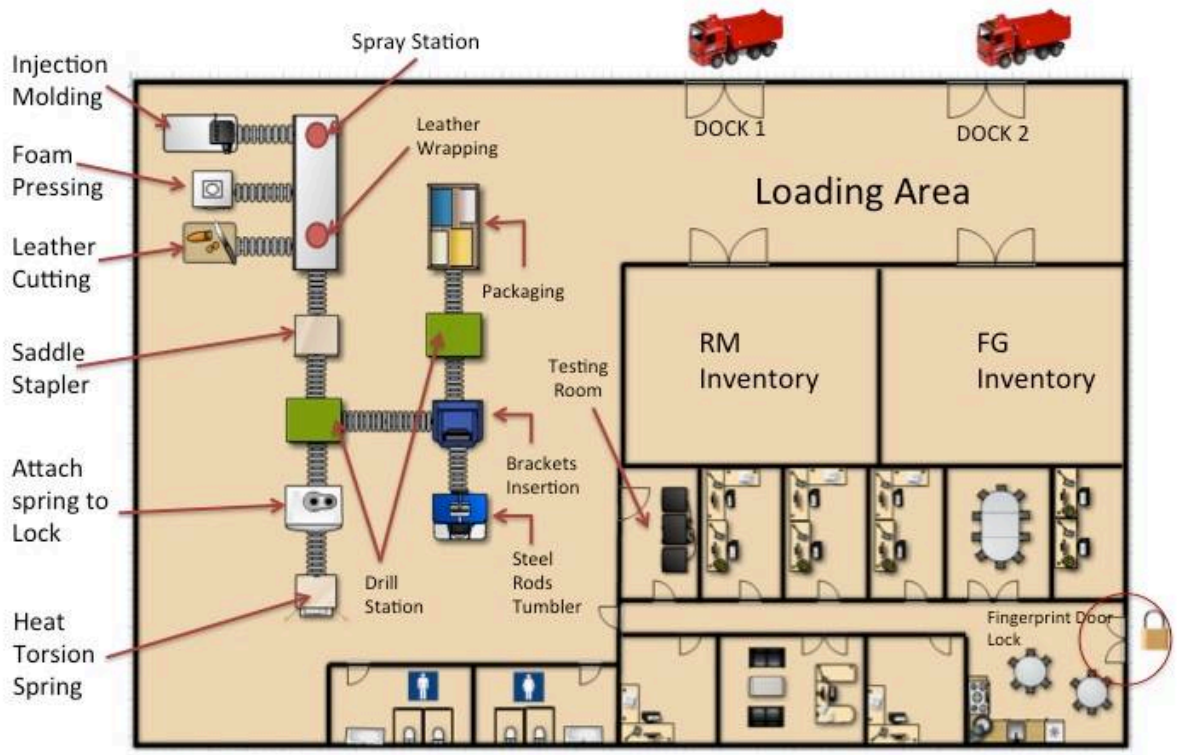
[57] "Utah to California Comparison." *Economic Development Corporation of Utah.* N.p., n.d. Web. 23 Nov. 2014. <http://www.edcutah.org/ut-ca_comparisons.php>

[58] "Utah's Outdoor Products Companies." *Utah Governor's Office of Economic Development.* N.p., n.d. Web. 23 Nov. 2014.<http://business.utah.gov/programs/outdoor/companies/>

[59] "2821 West Parkway Blvd, Salt Lake City, UT 84119." *Cityfeet.com.* N.p., n.d. Web. 23 Nov. 2014 <http://www.cityfeet.com/cont/ForLease/LN18911993/2821-West-Parkway-Boulevard-Salt-Lake-City-UT-84119>

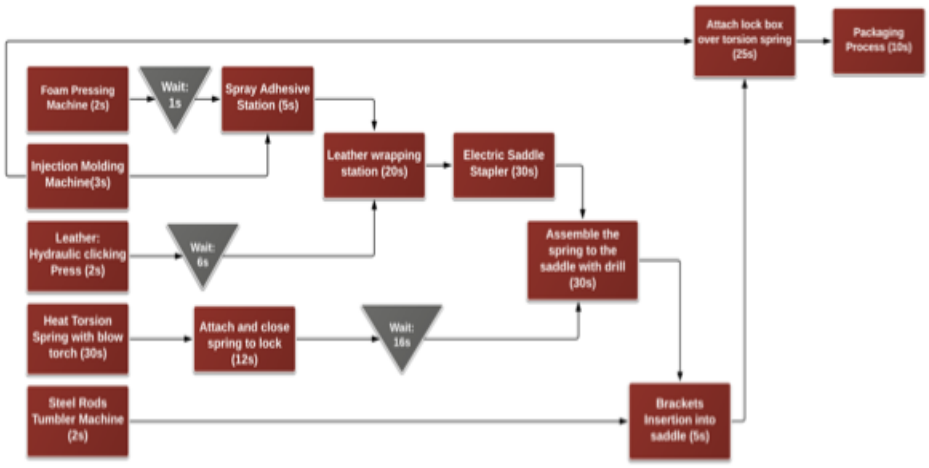
The building layout is divided into three main sections: a manufacturing section, an office section and inventory section complemented with loading docks. Employees enter the building through the fingerprint scanning door that opens into the break room. The office area includes a large office for the CEO and six standard size offices for other C-level executives and the purchasing manager. The facility is equipped with two separate bathrooms situated between the manufacturing area and office area. The manufacturing section is composed of a U-Shaped assembly line, minimizing space between stations, allowing duplication of worker functionality, lessening throughput time, and organizing process flow to track operations easily. There will also be a room specifically dedicated to testing of the raw materials and final products. The loading and and warehouse area have two loading docks facing directly the respective inventory warehouses to minimize transportation of materials around the building. One inventory is dedicated to incoming raw materials and the other one for outgoing finished goods; both inventories are conveniently placed near to the assembly line.



Process Flow Analysis

A conveyor belt serves as the main artery in the assembly process. The line begins with the injection molding machine, responsible for carbon fiber reinforced plastic shell and lock box production. Two separate molds allow simultaneous manufacturing of both components. The finished lock boxes are collected in a cart next to the machine, while shells continue onto the spray station. Meanwhile, cutouts from both the foam press machine and hydraulic leather clicking press move to the spray station where a worker sprays neoprene adhesive to a plastic shell and attaches the foam. The foam is then sprayed and the leather is wrapped on top.

The seat will then move to the saddle stapling station where 30 staples are punched in. Next, the seat merges with a mini line that is responsible for connecting torsion springs to cable locks. To connect these parts, stations within the mini line heat springs with a blowtorch, connect cable chains to them, and use round-nosed pliers to pinch the hot spring ends shut. Once the torsion spring/cable lock meets the main line again via conveyor belt it arrives at the drill station, where it is drilled to the underside of a saddle.



The seat travels to the bracket insertion station where brackets produced by our steel rod tumbler machine will be popped into the shell manually. The saddle will continue along the line and arrive at the second drilling station where a worker will drill screws affixing lock boxes to the underside of the saddle as well the 4-digit combination lock to the outside of the box. The lock box and 4-digit combination lock get to this station via cart. The packaging station is the last of the line before SecuriSeats are transported to the finished goods inventory room to await shipment.

Capacity of the machine

Maximum Yearly capacity Highest yearly demand across five years

Injection Molding Machine	2,436,480	238,092
Foam Pressing Machine	3,654,720	238,092
Hydraulic Clicking Press	2,436,480	238,092
Saddle Stapler	249,600	238,092
Steel Rods Tumbler	2,436,480	238,092

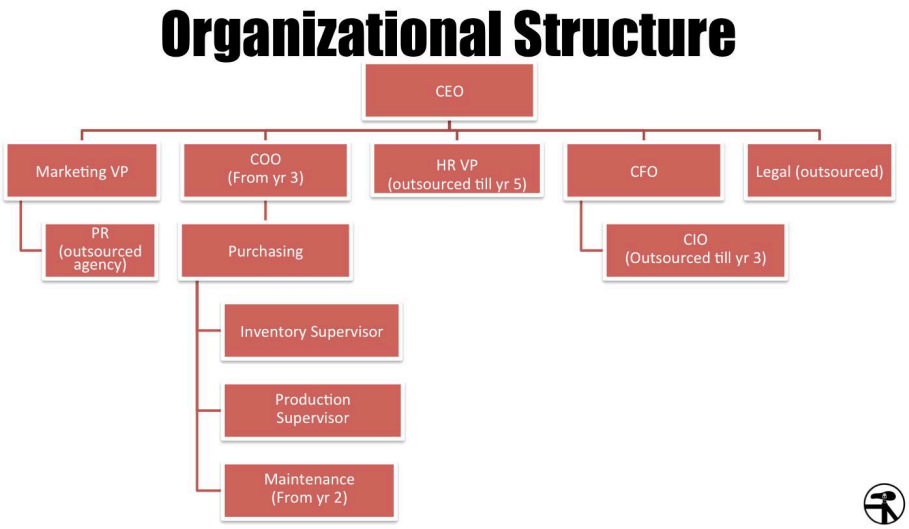
We calculated cycle time approximations for our machines and manual tasks, and identified bottlenecks at the saddle stapling station and blowtorch station. These bottlenecks require 30 seconds each, therefore giving us a cycle time of 30 seconds. Maximum capacity came out to 249,600 units per year by calculating available time per year and dividing by a cycle time of 30 seconds[60]. This capacity is just under our year 5 demand needs, which will allow us to keep our process flow the same without additional machines.

To complete capacity analysis, we need to know the machine and labor capacity needed to run the assembly line. Output per full-time worker each year is assumed to be 35,388 units per year[61]. The machine capacity is what we are primarily concerned with however, as adding machines is a longer, more expensive process than adding labor. For years 1 to 5, one of each machine will suffice.

Organizational Structure

Year 0 and 1

Being a startup company we decided to comprise our initial staff of four managers starting from year zero. The CEO will carry out operations functions, allowing him or her to build relationships with the various suppliers and distributors of



[60] Calculations: (60sec/min*60min/hr*8hrs/day*5hrs/wk*52wk/yr÷30sec).

[61] 2949 units/month[61]*12 months= 35,388 units/year

SecuriSeat. The Purchasing Manager will assist the CEO with day to day tasks, such as ordering, shipping, and tracking materials. We will also hire a Marketing VP from year zero to oversee new product development, plan an advertising strategy and establish relationships with marketing channels. We will hire our own CFO but outsource our Human Resources, General Legal Counsel and Chief Information Officer. A production supervisor will be hired to monitor and optimize process flow. The company staff will also include an inventory supervisor to control the arrivals of raw materials and organize the company's inventory beginning in the end of year 0. Both supervisors will report to the Purchasing Manager.

Year 2

Starting in year 2 the firm is going to outsource a Public Relations agency that will work 12 hours a week for 4 months in order to achieve PR goals allocated in the marketing plan. We will also hire a maintenance employee to clean and maintain the facility.

Year 3

As the company begins to show positive cash flows by the end of year 2, we will relieve the CEO of the responsibility of monitoring operations and instead hire a Chief Operating Officer. With this change, the Purchasing Manager will be directly under the COO and have the Inventory Supervisor, Production Supervisor and Maintenance Employee reporting to him or her.

Year 4 and 5

No change in the organization staff will occur in year 4. In year 5 the company will reach a size of 20 people so we will finally hire our own Human Resources Vice President.

Compensation

Our company will start in year 0 with a total of 9 non-production workers and reach 12 by year 5. To estimate wages we researched the industry's and Utah's average for the specific positions. Compensations for outsourced positions, such as HR VP, Legal Counsel or PR Agency, are based on per hour fees and do not include benefits. We also account for a growth in managers' wages of 1.5% every year. On the other hand, production worker range from one in year 0 to 8 in year 5. Their salaries are based on the average production occupations hourly

wages in Utah of $16.64. We will also pay an additional 20% of benefits to all company employees. [62]

Quality Control

Early Stages

To ensure a reputation of high quality products, we will take several quality control measures in our operations. We will allocate $90,000 for new product development to create a feasible and functional design. We will insist on high visibility with our new suppliers to communicate order specifications continuously and monitor material quality.

Inspections/Testing

In order to mitigate product failure we will conduct inspections at different points of the process. To achieve this in year 0 we will buy one Push and Pull Force Testing Machine and one UV Weathering test machine that will be housed in the testing room, where all inspections will happen.

Before production, each batch of raw materials will be inspected visually and by using the testing machines. We will pay particular attention to the quality of the torsion spring and cable chain making use of the push and pull force testing machine. During production we will test the plastic shell after the molding step by carrying out compression tests on one shell a day.

Lastly, once the product is finished we will conduct two different inspections, regular and invasive. Regular inspections will be exercised by production employees and include checking the smoothness of the leather, the accuracy of the saddle stapler, a brief assessment of the torsion spring, and packaging inspection. These inspections will be done on ten finished SecuriSeats a day, for a sampling percentage of 5.6% in year 1. Invasive tests will be conducted using the testing machines. Since we are likely to test the product to its breaking point, we foresee one SeacuriSeat per day will be destroyed. First, we will use the push and pull testing machine to test ease of retractability, as well as the durability of the torsion spring. [63] We approximated that a frequent biker will use the product five times a day, and assumed a product life span of five years to calculate the total expected utilization of 9,300 times over the products lifetime. This said, we

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[62] "Utah - May 2013 State Occupational Employment and Wage Estimates." *Bureau of Labor Statistics.* N.p., n.d. Web. 24 Nov. 2014 <http://www.bls.gov/oes/current/oes_ut.htm#51-0000>

[63] "Plastic UV Weathering Test Machine." *Alibaba.com.* N.p., n.d. Web. 23 Nov. 2014 <http://www.alibaba.com/product-detail/Plastic-UV-Weathering-Test-Machine_1585669979.html?s=p>

conduct 12,000 repetition pull tests on each inspected seat to account for variation in use. The other invasive testing will include compression testing of the lock box to make certain it will not shatter. Lastly we will conduct weathering tests to inspect the seat cover's resistance to solar exposure using the UV testing machine, purchased in year 0. [64]

Control Chart

False Positive

In order to measure whether our production process is in control, we will generate various control charts. Because testing is continuous and our product does not have high liability risks, we are concerned mainly about reducing Type I errors; which would indicate that our production process out of control when it actually is. Thus, we will use three standard deviations when calculating process capability.

Inventory

Raw Materials

For the SecuriSeat, there are three main types of inventories that we need to hold: raw materials, work in process, and finished goods. Raw materials is made up of yearly cycle stock, safety stock, and in-transit stock of each individual material. The stainless steel brackets, imitation leather, recycled polyethylene foam, neoprene adhesive, and plastics that make our saddle and lock box come in bulk sizes we break down into unit amounts. The raw materials and their respective amounts in each seat are as follows:

- ✦ .06kg Stainless Steel Bracket
- ✦ .2kg 55% Carbon Fiber Reinforced Nylon Plastic Saddle
- ✦ .0542m² Polyethylene Foam Cutout
- ✦ .058m² Imitation Leather Cutout
- ✦ 1 Torsion Spring
- ✦ 1 Nylon-Covered Kevlar Chain Lock
- ✦ 7 ¼" Screws
- ✦ 0.0068kg Neoprene Spray Adhesive
- ✦ 30 Construction Staples
- ✦ .15kg of 75% Carbon Fiber Reinforced Plastic Lock Box

Cycle Stock

To calculate cycle stock for each material, we had to determine economic order quantities (EOQ) of each material. We also had to know the cost per unit of each material and the fixed

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[64] "Push Pull Force Test Equipment." *Alibaba.com.* N.p., n.d. Web. 23 Nov. 2014 <http://www.alibaba.com/product-detail/Push-Pull-Force-Test-Equipment_60080232825.html?s=p>

portion of ordering costs. In order to calculate the fixed portion of each order cost, we made the assumption that two workers, each working two hours per order at Utah's average production wage rate, would be sufficient for each order. With that assumption, we arrived at a cost of $66 per order. The final assumption we used to find EOQ was the carrying cost rate, which we set at 30% of cost of goods sold.

Safety Stock:

To protect our company from both uncertainties in supplier lead times as well as variabilities in the demand for materials, we calculated each material's safety stock[65]. Service level, which measures the percentage of time we are able to meet customers demand, is one of the main drivers in safety stock calculation. As shown in OM Exhibit __, service level decreased slightly in the first three years of our product's life cycle, but overall remained stable.

Year	Revenue/Unit	COGS/Unit	CS	CE	SL	Z Value
1	$ 25.84	$ 8.95	$ 16.90	0.052	99.70%	2.73
2	$ 24.91	$ 6.83	$ 18.09	0.039	99.78%	2.83
3	$ 24.78	$ 6.84	$ 17.95	0.039	99.78%	2.85
4	$ 24.72	$ 7.05	$ 17.66	0.041	99.77%	2.85
5	$ 23.89	$ 6.91	$ 16.98	0.040	99.77%	2.85

In-transit Stock

To forecast amounts of in-transit stock, we used weekly mean demand, provided by our BASES Model, as well as each materials' transit time. An average of four weeks was estimated as the transit time to receive most of our materials come from the suppliers in China to our warehouse in Utah. Adhesive, screws, torsions springs, and staples are from suppliers within the United States, and therefore have a transit time of three days.

Work in-process

The key assumption used in calculating WIP was that it would take our company one week to complete a production order.

Finished Goods

Finished goods inventories are made up of cycle stock, safety stock, and pre-build stock. Cycle stock arises from a "gradual depletion" of production orders, and is calculated by taking overall average demand per week and dividing by two. Because it is tied to average demand per week, as demand increases year to year, so will cycle stock. For finished goods safety stock, we assumed our total lead time to be two weeks, due to the assumption that unexpected variability in

[65] OM 323 Financial Impact of Supply Chain - The Financial Impact of Supply Chain Decision.

demand in the first week will be reflected in the next week's production. Finally, our finished goods pre-build stock is rooted in calculations from our aggregate demand plan. Pre-build stock for each year is the previous year's safety stock plus one percent of the current year's demand.

		Raw Materials	Work In Process	Finished Goods	Total
Year 1	Units	475976	1271	8666	485913
	$	$ 67,972	$ 8,644	$ 77,524	$ 154,140
Year 2	Units	1065029	3349	20053	1088430
	$	$ 177,724	$ 19,124	$ 136,954	$ 333,802
Year 3	Units	1108961	3566	27173	1139700
	$	$ 182,001	$ 20,103	$ 182,093	$ 384,197
Year 4	Units	1022272	3438	27311	1053021
	$	$ 165,700	$ 19,746	$ 188,855	$ 374,300
Year 5	Units	1378786	4747	52965	1436498
	$	$ 238,773	$ 26,234	$ 342,408	$ 607,415

In year 4 our inventory totals decreased, but grew again in year 5. This was due to a 10% increase in our year 4 competition adjustments, and although our projected demand increases in this year, demand adjusted for competition is actually less than in year 3. In year 5, even though we increase our adjustment for competition by 5%, a large increase in both ACV and awareness allowed our demand levels return to normal.

Environmental Impact

The company strives to reduce the impact of operations on the environment, and takes various initiatives to achieve this. Our decision to locate in a facility equipped with skylight windows reduced electricity consumption and cost. [66] We recycle paper, plastic and aluminum both in the manufacturing and office areas. As Steven Eppinger, professor of management science and innovation at MIT argues, sustainability is designed into the product and is pursued through the materials used. [67] This being said, the SecuriSeat will be produced using recycled polyethylene foam and the packaging will be recyclable certified to the Forest Stewardship Council (FSC) and Sustainable Forestry Initiative (FSC) standards. [68]

Operations Integration

Marketing

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[66] "2821 West Parkway Blvd, Salt Lake City, UT 84119." *Cityfeet.com.* N.p., n.d. Web. 23 Nov. 2014 <http://www.cityfeet.com/cont/ForLease/...84119>

[67] Hopkins, Michael S. "How Sustainability Fuels Design Innovation." *MIT Sloan Management Review.* Mit.edu. 1 Oct. 2010. Web. 23 <http://sloanreview.mit.edu/article/how-sustainability-fuels-design-innovation/>

[68] "Focused on Your Needs and on the Environment." *All packaging Company.* N.p., n.d. Web. 23 Nov. 2014 <http://www.allpack.com/Environmental.php>

The firm's operations decisions depend on marketing assumptions and forecasts. Surveys from the new product development stage, various interviews and focus groups determined customer attributes that operations needed to reflect in the final SecuriSeat. With their BASES forecasts, we configured our aggregate plan, and our estimated monthly production, and material levels necessary to meet these demands.

Informations Systems

Information systems will help us measure our operational performance. One of the Key Performance Indicators we will utilize will measure the scrap rate of our products. We purchased a terminal scanner and its software package to that we will use to read QR codes on material shipments as well as keep track of inventory levels.

Finance

By running the optimization we can calculate the direct labor needed, a factor of cost of goods sold. Holding costs in turn are calculated using 30% of cost of good sold which illustrates the integration of direct labor and carrying costs.

Operations costs include inventory, utilities, depreciation and workforce requirements. Laborers running the production line are a direct input of cost of goods sold. Our decision to make or buy certain components of our product changes the depreciation on the income statement. Since we decided to buy the torsion spring instead of making it, our costs of good sold increases but depreciation on the income statement would decrease. All equipment, machines, and facilities need to be depreciated and included in the income statement. In addition, to satisfy the demand in January of year 1, we have to run the production in year zero for two months, which increases our expenses and depreciation in year 0.

Optimistic/Pessimistic Scenario Analysis

Increases in demand yield higher levels of materials and hence holding costs. In our base case spreadsheet, yearly demand increases also create a need for extra production workers, therefore raising labor costs. Perhaps a large increase in demand might require our employees to work more than thirty-two hours a week, or even work a little overtime. Considering this, we have taken measures to lower the risk of uncertainties in demand for our end product. Our finished goods safety stock will combat demand uncertainties. However, if an increase significant enough, our safety stock may not cover the entire amount. Another important consideration is that since the majority of our products have an average transit time of four

weeks, a quick spike in demand might cause backorders if we are not careful and concise in our planning.

Demand can also change negatively. If demand were to decrease, it would change our company's financials. A decrease in demand would leave us with excess raw materials, which we would continue to pay holding costs for. Our manufacturing facility itself is set up for growth, as we currently utilize half the available space. If demand were to decrease consistently we would consider downsizing our facilities and possibly the amount of workers we employ. We believe there will be variability in demand and through market research and careful planning; we will be in a strong position for dealing with these variations.

Aggregate Plan

Demand planning is important to our company so we do not waste limited funds and can serve our customers' needs. The aggregate plan breaks down production per month, adjusting demand for seasonality.

We will produce 13% and 12% of total forecasted demand units in April and May, when demand is highest during peak bike season. During the holiday season, especially December, we also expect a spike in sales to take place and for that reason we are producing 12% of demand in this month. We will produce 8% for both June and July as they are summer months with higher demands because they are also during bike season. Additionally, we will increase our production in August and September to accommodate the back to school rush with 9% and 11% of total forecasted demand units respectively. Production is low during the months of October, November, January, February and March, ranging between 3% and 7% of total demand.

We also used the aggregate plan to determine how many laborers we need to meet monthly demand. Each full-time worker would need to produce an output of 2,949 units per month. (exhibit)

The company follows a level production plan with slight fluctuations. The fluctuations were not great enough to require changes in labor. With the exception of year 4, the capacity utilization of labor will be at almost 98% across the five years, demonstrating effective use of our labor force. The reason we are not using labor efficiently, utilizing only 82% of labor capacity in year 4, is because company policy states we cannot fire employees. Thus we have to keep the seven employees we acquired in year 3. By year 5 we are utilizing a fully level production plan.

(exhibit)Output per full time workers:4.28*5*8*3,600*0.95/ throughput time.

maximum Use of Overtime: 5/40= 13%

Minimum Utilization of full time workers:32/40

End of year Inventory: current safety stock plus 1 %of the forecasted demand in next year.

Overtime production cost as 1.5 times of the COGS, part time production is 2 times of COGS.

Inventory holding costs is 30 percent of the COGS divided by 12

Make or Buy Analysis

Buying the machine would add significant expenses in every year. If we buy the torsion springs we could save $77,258 in the first year and $242,891 in the fifth year. Therefore, we decided to outsource our spring from All-Rite Spring Company. See OM Appendix __ for full Make vs. Buy analysis calculations.

SECURISEAT

Because you have enough to worry about

IS Overview and Strategy

As with any successful company, we put an immense amount of importance on keeping costs as low as possible, while at the same time maintaining a standard of quality. Our goal was to create a company website that was well-organized, interactive, and attract both current users of Securiseat, as well as potential customers in our target market. Another key strategy we are using to attract the maximum amount of customers possible is search engine optimization (SEO). With higher rankings on search results pages, we can assure that it is very easy for people to find our website. We will hire a CIO beginning in year 3 to manage the information systems of our company. Before year 3, our systems will be maintained through an outsourced IT company.

In our selection of both software and hardware for our company, we were determined to select only the components that would drive Securiseat's efficiency as an organization. Cost-efficient investments in quality hardware and software will enable higher levels of performance. By utilizing the selected hardware and software we will be able to maintain a high level of visibility between our operations, marketing, finance and information system departments.

Long-Tail Strategy

Considering our competitors have already been in our market for the past few years we thought it would be wise to use a long-tail strategy to optimize the number of hits we receive on our website. We will be utilizing long-tail keywords in order to avoid competing with established companies who are already optimizing more popular search terms. An example of the long-tail keywords we would be using would be "the bike seat with a retractable lock" or "how to protect my bike in a suburban setting". By using unique phrases to find our customers we will be better able to focus on the consumer intent, rather than sole needs. [69] his is because a customer who types in a more complex phrase has a general understanding of what they are looking for, and is more likely to buy our product if they find it.

Website Design and Goals

Design

[69] Boudreau, John. "How to find the Right Long-Tail Strategy for Your Content" *SteamFeed.* Steamfeed.com. Feb. 2014. Web. 23. Nov. 2014. <http://www.steamfeed.com/find-right-long-tail-strategy-content/>

The website design for http://www.securiseat.me has a professional, simple and urban feel to reflect the image that our product portrays. Insert pic of landing page.
Upon reviewing the websites of our competitors, Seatylock and InterLock, we discovered that although both had minimalist designs (need source), there was no personality to their sites, a factor we thought was important to have across our website.
We understand that bikes reflect rider tastes and that many commuters have very personalized bikes. Acknowledging this, the SecuriSeat website features various images of commuters throughout urban and sub-urban settings. The SecuriSeat logo is featured on every page to serve as a brand reminder. In order to maintain the feeling that our product is simple and easy to use, we emulated this ideology throughout our website by making it user-friendly. The SecuriSeat website includes a page with an instructional video to demonstrate how simple it is to change a bike seat to potential customers.

The homepage additionally has links to the all pages which include About, Events, Contact, and Purchase. The About page gives a simple description of the SecuriSeat, and a little bit of information about the idea behind the product. The Events page is a unique aspect of our website where customers can gain insight into the biking community and see what bike events are coming up. A contact page provides an easy way for customers to call or email a representative with questions. And lastly, the purchase page links to Amazon, where customers can buy a SecuriSeat. The links remain at the top of every page, soa customer can easily navigate where they want.

Goals

Increase Retention Rate

In order to differentiate ourselves from our competitors and keep retention rates up, the SecuriSeat website features an events page and a sweepstakes winner page. Creating an events page will allow users to keep up with the latest local bicycle related events such as races and charity events. The events page will also set us apart from our competitors because neither Seatylock nor InterLock feature a complete nor updated one on their websites. Additionally, by announcing the raffle winners of free SecuriSeats from the expos and events on our website, we provide a means of incentivizing people to visit. Once on site to check raffle results, we hope to grab their attention with other pages so they continue engaging with the site. If we have a high retention rate, we know users are coming back and interacting with our pages. These

sweepstakes and events pages in particular will differentiate ourselves from our competitor websites by creating an alternate purpose for customers to visit our website other than purchasing or learning about our product.

Inform Potential Customers

Acknowledging a percentage of our website visitors are going to our site to learn about our product, we created a page to make our users more informed about the SecuriSeat. By creating an About page we are able to describe and feature our product and provide an overview to customers. We can calculate how many visitors are coming to our website to learn more about our product by studying number of views the About page has. We can then get a conversion rate percentage from the about page to the purchase page to see how engaging our product description is. The higher conversion rate, the more confident we knowing we have successfully informed customers.

Increase Profits

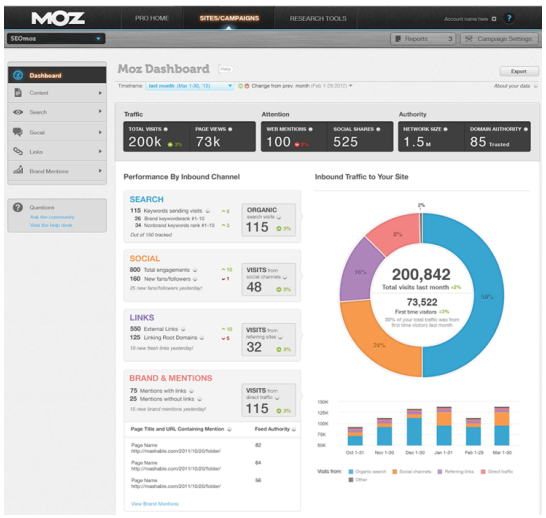
To increase profits we want to increase the number of users who visit our website and buy our product onsite. In order to lessen the liability that comes with selling our product directly onsite, we created a purchase page that features links to retailer websites. We can measure the success of our purchasing page based on how many customers link to retailers and buy a SecuriSeat from them. We can also use our KPI regarding our website's purchasing funnel, which gives us volume of traffic to our site, to links within the website and ultimately to purchase. This will provide insight on which pages are most effective in motivating buyers to visit our purchasing page.

Increase Subscribers to Newsletter

Our final goal is to increase overall number of subscribers to our newsletter which will allow us to keep people up to date on upcoming events, sweepstakes and special promotions. To attract users to sign up for our newsletter we have placed a call to action email sign-up option at the bottom of the events page. We can easily measure the success of our newsletter based on the amount of people who subscribe to it. If we find that not enough users are signing up to our newsletter, we will target the pages with the most traffic to see if the button performs better there.

Search Engine Optimization (SEO)

Search Engine Optimization is defined as a series of tactics and techniques to improve the ranking of a website on a search engine result page (SERP). [70] This directs more visitors to websites that rank well and is an indispensable part of our own online marketing. When people first hear of our product, they will likely visit our website first to get more information. A high-ranking spot on the results page not only portrays our website as a reliable link, but it also gives our website more visibility, therefore increasing the site traffic and hopefully sales. There are two types of SEO tactics: on-site and off-site. An on-site tactic focuses on our website and its functionality. Search engines provide results using a website's title, description, and the overall structure to see if they match the keywords customers have typed in. Optimizing keywords increases our results on the search engines organic page. Off-site tactics include the rest of the Internet and how they link to your site. Search engines find how many inbound links connect to our site and weigh them by how respectable the websites providing the links are. [71] Knowing this, the tactics below are the ones we will use to improve SEO.



Moz

We will use Moz**,** a cloud-based software, to further improve our Search Engine Optimization and create a more-informed platform to launch online marketing strategies. This software will let our company see which key search terms optimize our organic rankings, increasing traffic to our site, and measuring the strength of inbound links. Moz offers the added function of allowing our company to see what our competitors are doing, which links are driving the most traffic their way and where their brand is being mentioned. Furthermore Moz will be helpful to monitor our brand

[70] Parikh, Aashna. Deshmukh, Sanjay. "Search Engine Optimization." *International Journal of Engineering Research & Technology*. IJERT.org. Nov. 2013. Web. 22. Nov. 2014. <http://www.ijert.org/view.php?id=6593&title=search-engine-optimization##tab1>

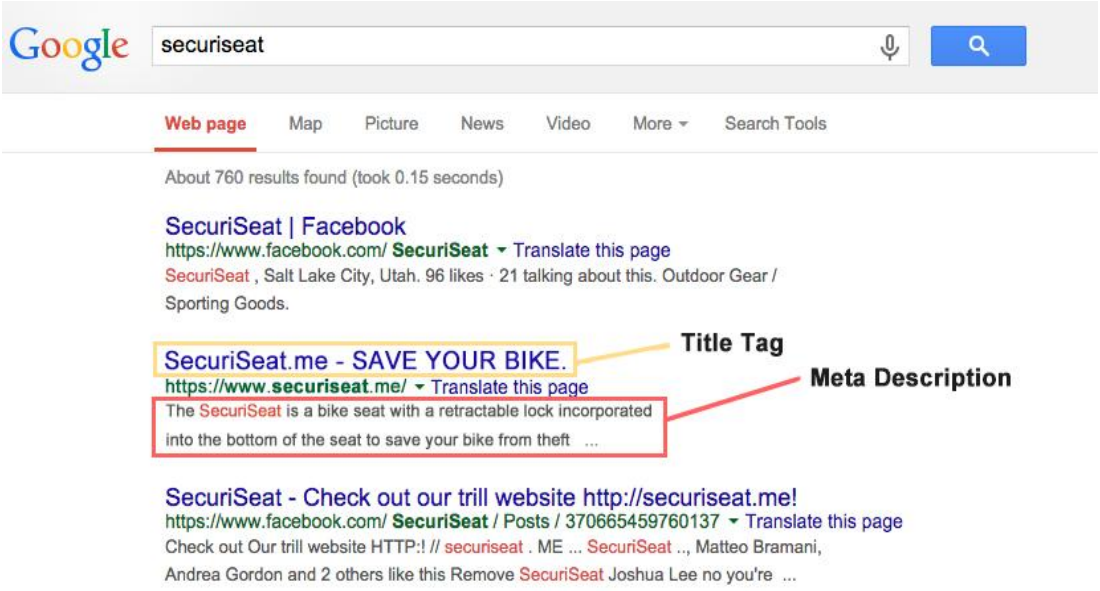
[71] Lieberman, Mike. "Onsite vs. Offsite Search Engine Optimization - What's The Right Mix?." *Square 2 Marketing*. Square2marketing.com. 26 Mar. 2013. Web. 22 Nov. 2014 <http://www.square2marketing.com/...Right-Mix>

image by displaying where SecuriSeat is being discussed over the Internet. We will then target these outlets, create more connections and more marketing opportunities. [72]

On-site Tactics

Unique title tag and meta description for each web page

In order to increase SEO we will create an effective title tag and meta description. A title tag is a headline of search results and the meta description, located below the title tag, explains what the website is about. They are influential in that they are often the first impression a user has about our product. By making the title tag and meta description as captivating and unique as possible, we hope to draw in more potential visitors. IS Exhibit ___ shows our sample title tag and meta description of our website. As SecuriSeat is a new and innovative product in the bicycle, bicycle parts and bicycle accessories industry, people will look for more information. This being said, we decided to use the basic description of our product.[73]



Off-site Tactics

Optimize for Multi-Channels

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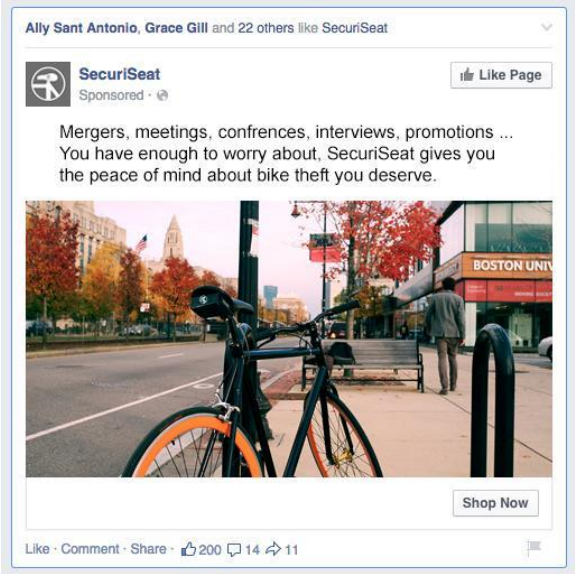
[72] "Software for Managing Inbound Marketing and Local SEO." *Moz.com*. N.p., n.d. Web. 22 Nov. 2014. <http://moz.com/products>

[73] Price, Miles. "12 Basic On-Site Tactics for Optimized Results." *Search Engine Journal.* Searchenginejournal.com, 8 Nov. 2007. Web. 16 Nov. 2014. <http://www.searchenginejournal.com/.../5966/>

In order to further improve our SERP ranking, we will partake in off-site tactics, incorporating links on Facebook, Twitter, Pinterest and LinkedIn. We will maintain pages on these social-networking platforms to reach more potential customers. This is a fundamental step in the process of increasing our SEO, allowing us to extend our network, share news with a community, and promote SecuriSeat, all while building a positive online reputation. [74]

Internet Marketing

Facebook



In order to create a positive brand image across the Internet, SecuriSeat will be using native advertising in order to avoid the negative connotation that can come with online advertisements. Therefore, we will be using Facebook and creating posts through our Facebook page. Whenever someone likes our page or post, their friends will be able to see this activity which will increase awareness of our product. By advertising in this way, people do not suspect they are being targeted and will be more open or likely to visit our site. In addition, with the use of Facebook, we will be able to create specific posts and carefully select who sees them. [75] By targeting specific markets we will be able to create more effective ads that capture viewers attention. We hope to create captivating campaigns that tell a story, shown to be more effective than informational ads on Facebook.[76]

Advertising with Facebook allows us to be in charge of our budget, audience, and type of advert. With this amount of control, we will know exactly what we are getting for our money.

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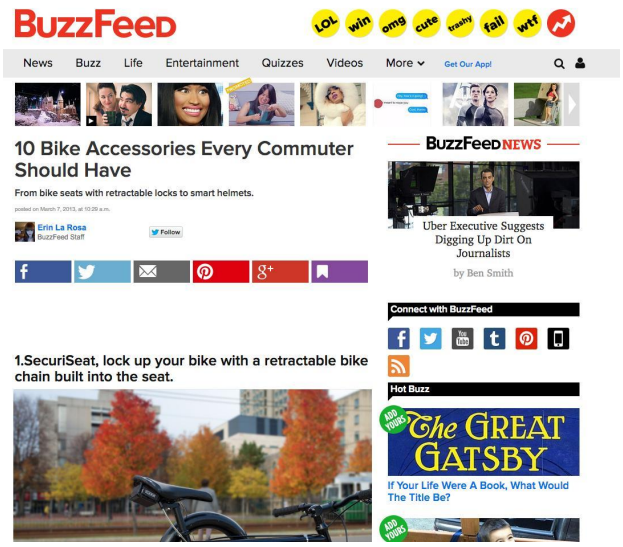
[74] Edwards, Victoria. "SEO Basics: 8 Essentials When Optimizing Your Site." *Search Engine Watch*. Searchenginewatch.com, 31 Dec. 2013. Web. 16 Nov. 2014. <http://searchenginewatch.com/article/2259693/SEO-Basics-8-Essentials-When-Optimizing-Your-Site>

[75] "The Power of Facebook Advertising." *Facebook.com*. N.p., n.d. Web. 22 Nov. 2014. <https://www.facebook.com/business/power-of-advertising>

[76] Goel, Vindu. "How Facebook Sold You Krill Oil." *New York Times*. 2 Aug. 2014. Web. 22 Nov. 2014. <http://www.nytimes.com/2014/08/03/technology/how-facebook-sold-you-krill-oil.html?_r=0>

With the option to pay per thousand impressions or per click we have greater jurisdiction in the strategy we want to take in each campaign.[77]

BuzzFeed



By advertising our product through BuzzFeed, a media company that provides social news and entertainment-related information, we will be creating native advertisements that emulate blog posts. By using BuzzFeed to advertise we would also achieve a competitive advantage by creating custom blog posts such as "10 Bike Accessories Every Commuter Should Have", giving us the option to our competitors from being mentioned. Using this method to market our product will help boost awareness as well as prevent negative associations that non-native online advertising brings.

Key Performance Indicators and Activity Diagrams

Sales/marketing Operation KPI: Purchase Funnel (Klipfolio, and online dashboard platform)

Our primary KPI for measuring our marketing effectiveness will analyze customer acquisition process from first visit to end purchase, creating a purchase funnel. In order to determine the success of our marketing tactics, we will look at our website popularity. The website will be the first place people look after hearing of our product. According to our survey results, people indicated that they would most likely purchase our product online or in specialty stores. Therefore effectiveness of our website is directly tied to revenues. The purchase funnel is made up of five main stages that illustrate the typical customer acquisition process: awareness, interest, consideration, preference, and purchase. This tool specifically measures the number of people who find our product on the internet, get to our website, browse and actually purchase our products. Most importantly, it will calculate the conversion rate of how many visitors end up

[77] "How Much does it Cost to Advertise on Facebook?." *Facebook.* N.p., n.d. Web. 22 Nov. 2014. <https://www.facebook.com/help/214319341922580)>

purchasing a product. The sample dashboard in the appendix shows the layout of the daily report.[78] [See IS Appendix # : Sample Report-Purchase Funnel]

Google Analytics and Moz will collect data on the number of people at each stage; data a worker will be responsible for inputting it into Klipfolio. When Klipfolio receives the data, it will analyze, calculate conversion rates, and finally create a report in the format of a weekly purchase funnel for marketing managers to easily read. (See IS Appendix # : BMNP Diagram-Purchase Funnel) This data will also be compounded for monthly and yearly reports, allowing the company to keep track of website progress and plan accordingly to improve current online marketing strategies.

Manufacturing Operation KPI: Failed Inspection Rate

Our second KPI will measure end product quality by testing the functionality of our retractable cable chain. This will be accomplished by using a push-pull force testing machine to see if the cable will jam or break after being pushed and pulled 12,000 times. We will be testing one seat per day totaling to 31 samples a month, giving us a sampling percentage of .7%.

The information on each seat tested will be collected by the push-pull machine and recorded by the production supervisor on Microsoft Excel who will then calculate the failed inspection rate, dividing the number of failed seats by total seats produced.

The percentage found will be inputted into Klipfolio and displayed in report form for operations managers on their dashboards [See IS Appendix __]: Operations Dashboard]. If the operations managers find that a certain week has a failed inspection rate over 0.02%, they will examine seats from other batches that week to see if they are faulty as well. If faulty, they will then inspect the raw materials, production processes and the BMNP Diagram to pinpoint where the problem could have occurred. It is important for us as a company to know our failed inspection rate in order to maintain sustainable, cost efficient and precise operations.

IS Investment

Hardware: Work Station

[78] "Purchase Funnel." *Klipfolio.com*. N.p., n.d. Web. 22 Nov. 2014. <http://www.klipfolio.com/resources/kpi-examples/marketing/purchase-funnel>

Every office will have a desktop HP Z220 CMT, chosen for its high-quality and consistent performance, in order for employees to perform day-to-day business tasks. This specific model is designed to be easily serviced with a side panel that opens, allowing for quick upgrades and maintenance. We will purchase each for $1,209.99 on Amazon[79]. The monitor and keyboard-mouse sold separately will cost $157.99 [80] and $19.99 [81]each. We also plan to spend $359.00 on Asus Transformer Book T100TAs for employees who will travel to trade shows and expositions, as mentioned in the IMC plan. This model is a 2.5-pound tablet with an attachable keyboard convenient for travel [82]. The phones we are purchasing for our office employees will be Cortelco IP Phone C60s and costs $66 each [83]. We will buy two Brother MFC All-in-One Printers at $799.99 each, that have print, copy, scan and fax capability all built in one. [84]

Hardware: Inventory Tracking

In order to manage inventory more efficiently, we will buy Worth Data 7802 RF Terminal Scanners for $1495 to manage inventory information through barcodes on packages. The scanner is wireless and able to send the data collected to our online server, accessible by all employees. [85] We also need to make sure that Wi-Fi is consistent throughout the facility, so we have decided to buy a Netgear WNPR3700 Wireless Router because of the brand's reputation for reliability. It sells for $99.99 at any online retailer such as Amazon, Target, or Best Buy. [86]

Hardware: Security

In order to increase the security of our facility we have decided to purchase a security system. The Zmodo Internet & 3G Phone Accessible DVR bundle is the best seller in the Surveillance DVR category featured on Amazon. At $189.99, each package comes with four

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[79] "HP Z220 CMT Workstation Review & Rating." *PCMag.com.* N.p., n.d. Web. 22 Nov. 2014. <http://www.pcmag.com/...0.asp>

[80] "Dell 23" Widescreen FlatPanel IPS LED HD Monitor S2340M." *Bestbuy.com.* N.p., n.d. Web. 22 Nov. 2014. <http://www.bestbuy.com/site/...ksdevice=c>

[81] "Logitech MK 120 Classic Keyboard/Mouse Combo." *Quill.com*. N.p., n.d. Web. 22 Nov. 2014. <http://www.quill.com/mice-keyboard-combos/c...253>

[82] "Notebooks & Ultrabooks - ASUS Transformer Book T100TA." *Asus.com.* N.p., n.d. Web. 22 Nov. 2014. <http://www.asus.com/us/.../>

[83] "C60 Cortelco Executive IP Phone (2 sip) 8 dss 6712756 Product Detailed." *Applied-computer.com*. N.p., n.d. Web. 22 Nov. 2014.<http://www.appliedcomputer.com/In...>

[84] "Brother MFC-L9550CDW High Volume Color Laser All-in-One Printer." *Brother-usa.com.* N.p., n.d. Web. 22 Nov. 2014. <http://www.brother-usa.com/...lfF_-I>

[85] "802.11 Wi-Fi wireless RF Terminal Bar Code Scanners." *Barcodehq.com.* N.p., n.d. Web. 22 Nov. 2014. <http://www.barcodehq.com/7802rfterminals.html#pricing>

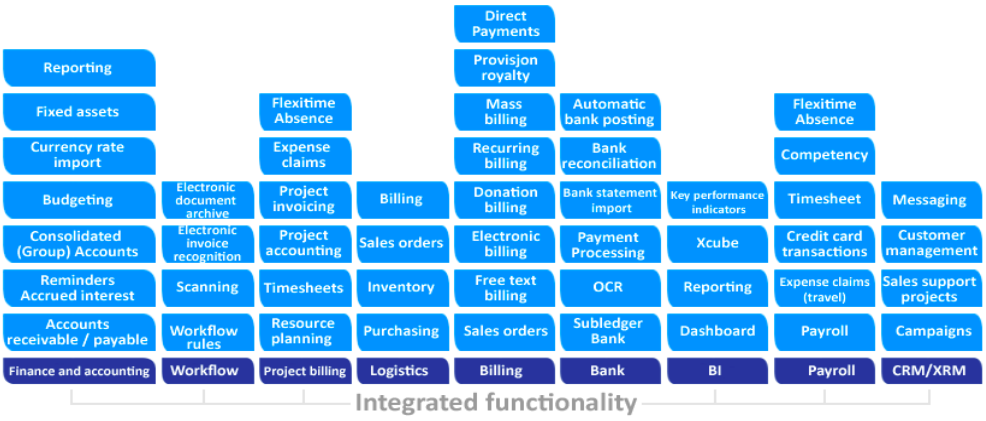
[86] "WNDR3700, WiFi Routers, Networking." *Netgear.com.* N.p., n.d. Web. 22 Nov. 2014. <http://www.netgear.com/home/...0.aspx>

night-vision cameras and a 500GB pre-installed hard drive. [87] In order to further enhance security, we will buy a Bio-Matic Fingerprint Door Lock for the main entrance of our facility. The lock retails for $299.95 on QVC.com. [88]

Software

Each office computer will be equipped with Microsoft Office that we will need to be bought separately. The plan we will purchase is Office 365 for business premium, which costs $12.50 per month. This plan not only has the latest version of office applications, but also includes online services such as email, online conferencing, online storage and sharing. Because of the cloud-based service of this plan, it is also considered Software as a Service (SaaS), which will be more useful than regular versions that exclude online services. [89]The other software necessary for the company is Avira Internet Endpoint Security designed for protection of workstations, servers, and emails. We pay an initial $150.50 for three users and will be charged $50 per each additional user. We have chosen Avira because it is commonly used internationally and has won a plethora of awards for its antivirus security. [90]

Service



[87] "Robot Check." *Amazon.com.* N.p., n.d. Web. 22 Nov. 2014. <http://www.amazon.com/...camera>

[88] "Bio-Matic Fingerprint Door Lock." *QVC.com*. N.p., n.d. Web. 22 Nov. 2014. <http://www.qvc.com/q...c>

[89] "Office 365 Business Premium." *Office.com*. N.p., n.d. Web. 22 Nov. 2014. <https://products.office.com/en-us/business/office-365-business-premium>

[90] "Avira Business Antivirus and Security Solutions." *Avira.com*. N.p., n.d. Web. 22 Nov. 2014. <http://www.avira.com/en/for-business>

In order to save storage space, we have decided to use a myriad of online services instead of off-line software. In order to evaluate which ERP fits our company best, we compared and contrasted two ERPs, Abas USA and Xledger, using a decision matrix that rate these ERPs based on a set of benchmarks. We came up with a ten rating criteria, including information quality, functionality, price, implementation speed, and so on. Each of the criteria were ranked on their importance, then rated with raw scores from 1 to 5 based on their product description and customers reviews. To get final scores we multiplied raw scores with their respective weightings. The decision matrix shows that Xledger won with a final score of 4.42. [See IS Appendix __: ERP Decision Matrix] The key advantage of Xledger that separates it from other ERPs is that it is cloud-based and flexible enough to be customized to our company specifications. It offers a variety of business management functions from which the company can easily select via role-based accessibility. [IS Exhibit # shows the overview structure of Xledger] [91]. In addition, downloading plug-ins is not necessary as the system is cloud-based and updates automatically.[92] We found detailed pricing information after speaking with one of their software specialists named Kathryn on the phone. Based on our company structure, she estimated that our customized Xledger software would require a down payment of $15,000, and an additional $6,000 a year per user. [93]

In addition to ERP, other online tools we will use include Moz and Klipfolio. Moz provides services to improve SEO and enable us to see what our competitors are doing. There will be no initial costs for the first month, but a monthly fee of $99 each subsequent month[94]. Klipfolio charges a $17 monthly fee per user to access the dashboard specifically created for our company. We are responsible for inputting data we've collected into Klipfolio; it analyzes the data and creates a visual report, extremely helpful in assembling monthly KPI reports. [95]

Our internet and phone service will be supported by Verizon. We selected the FiOS Business Internet Plan, a two-year agreement for six or more people. The price will start at

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[91] "Integrated Functionality." *Xleger USA*. N.p., n.d. Web. 24 Nov. 2014. <http://xledger.com/integrated-functionality/>

[92] "What is Xledger?" *Xledger.com*. N.p., n.d. Web. 22 Nov. 2014. <http://xledger.com/what-is-xledger/>

[93] Kathryn." Inquiry for ERP Price." Telephone Interview. 19 Nov. 2014.

[94] "Software for Managing Inbound Marketing and Local SEO." *Moz.com*. N.p., n.d. Web. 22 Nov. 2014. <http://moz.com/products>

[95] "An Affordable Plan that Grows with Your Business." *Klipfolio.com*. N.p., n.d. Web. 22 Nov. 2014. <http://www.klipfolio.com/pricing>

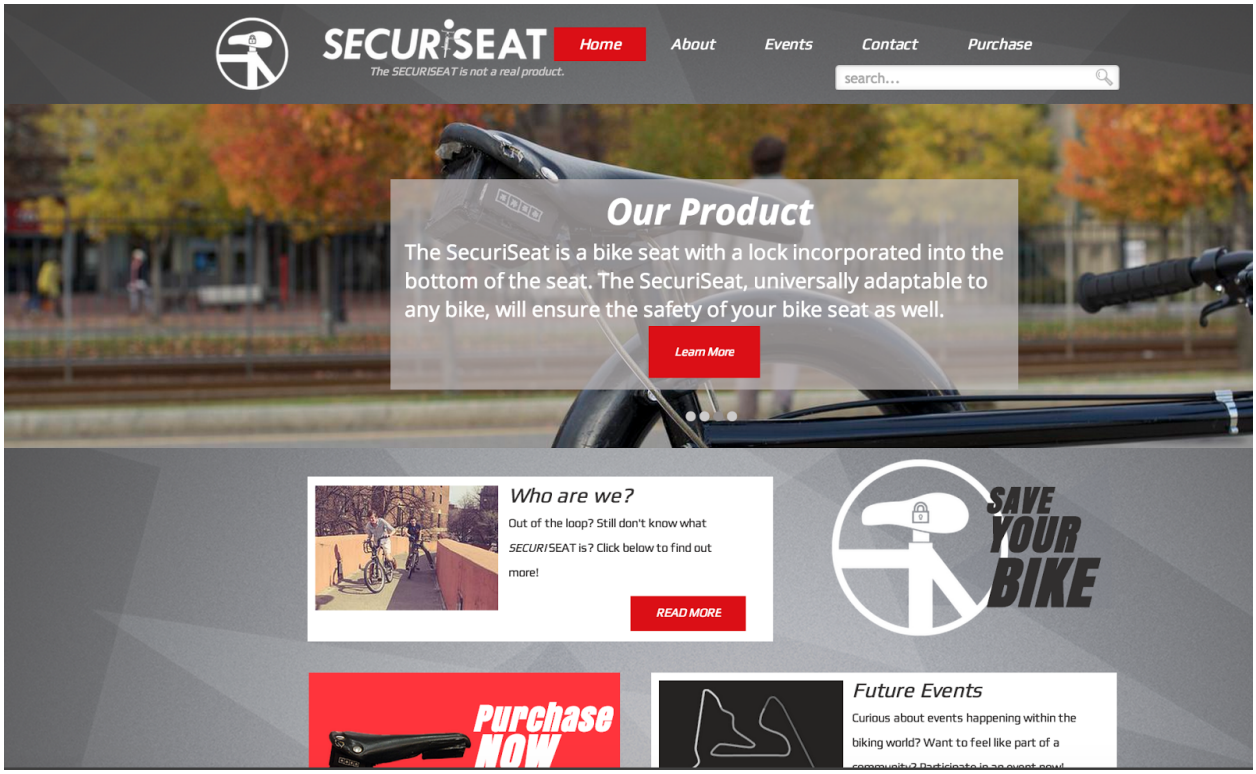
$274.99 a month plus taxes, fees, and equipment. [96] Online sales are important to our business, making up approximately 30% of the firm's sales. We plan to use the Amazon Web store as our online selling channel. The first month will be free, but we will then incur a monthly charge of $39.99 thereafter. [97]As for our web host, we will pay $5.99 a month for a business hosting plan provided by Host-ed.net, enabling our website to be accessible on the World Wide Web. [98]

IS Appendix # : Website Insight

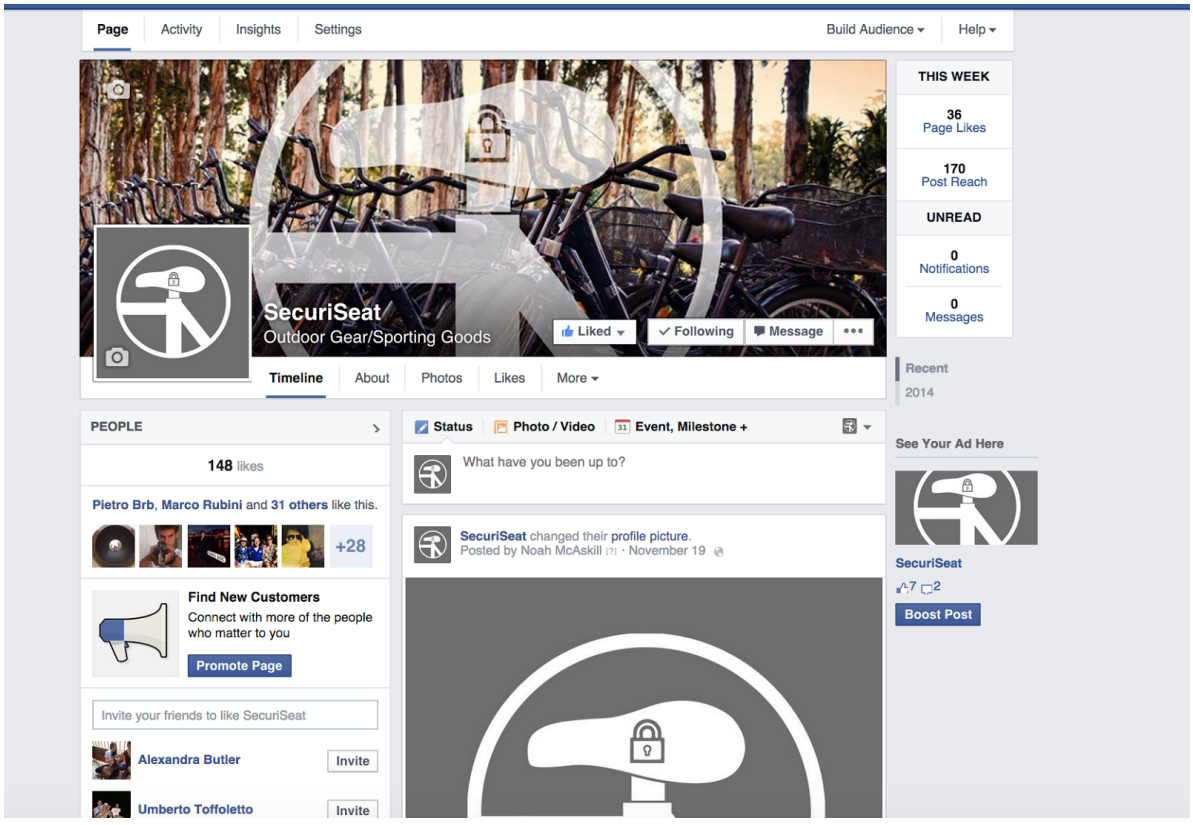
[96] "FiOS Business Internet Plans Prices." *Verizon.com.* N.p., n.d. Web. 22 Nov. 2014. <http://www.verizon.com/...PackageRef>

[97] "Amazon.com: Sell Online – Selling on Amazon – Pricing." *Amazon.com.* N.p., n.d. Web. 22 Nov. 2014. <http://www.amazon.com/gp/seller-account/mm-product-page.html?topic=200274770>

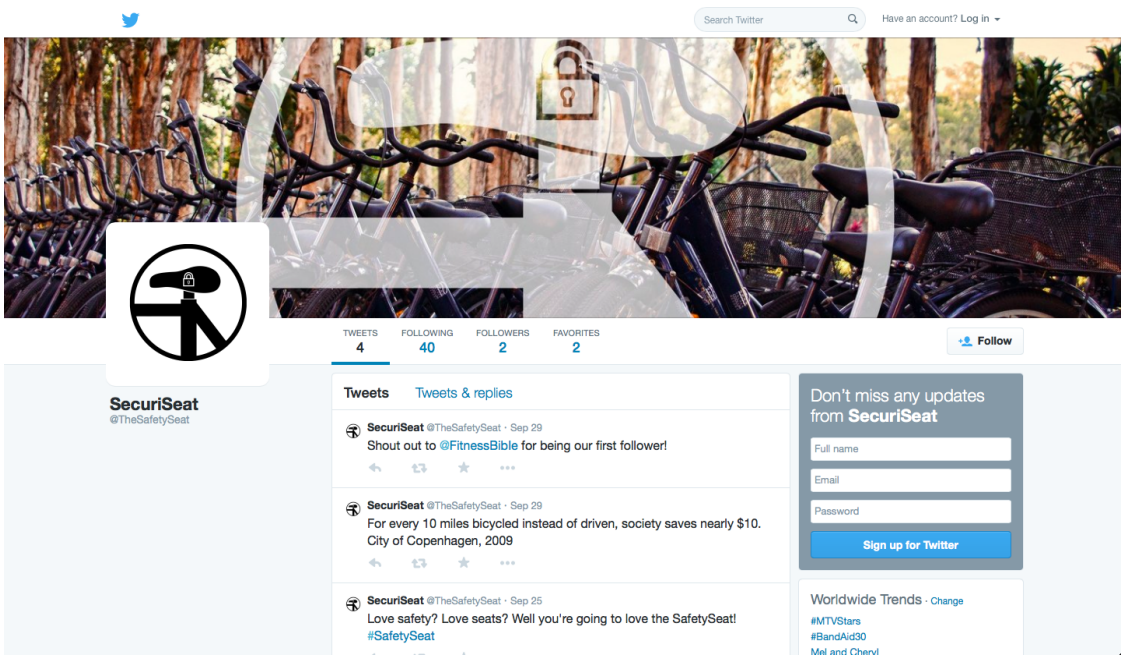
[98] "Shared Web Hosting Plans by Host-ed.net." *Host-ed.net.* N.p., n.d. Web. 22 Nov. 2014. <http://host-ed.net/web-hosting.php>



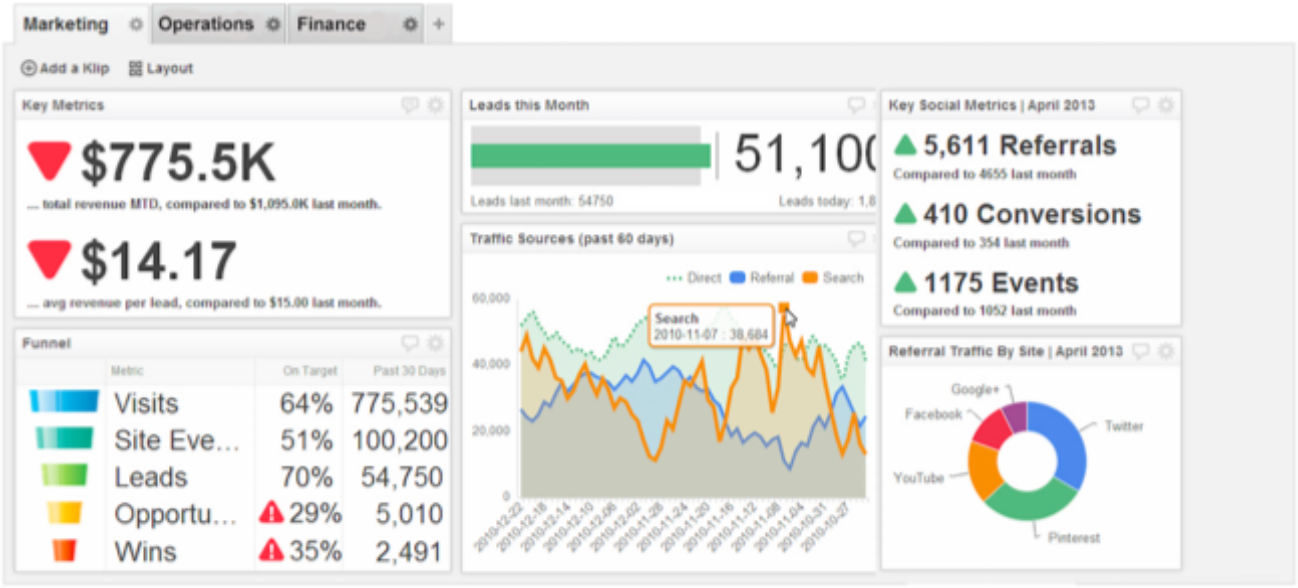
IS Appendix # : Facebook Insight



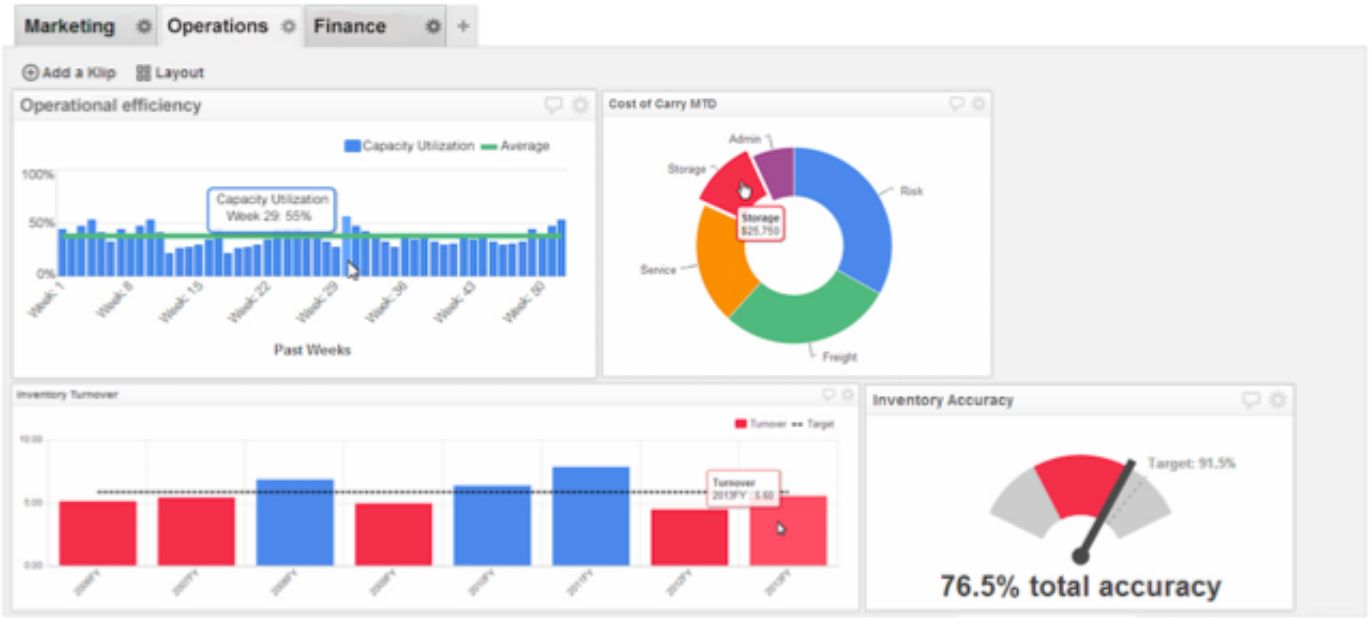
IS Appendix #: Twitter Insight



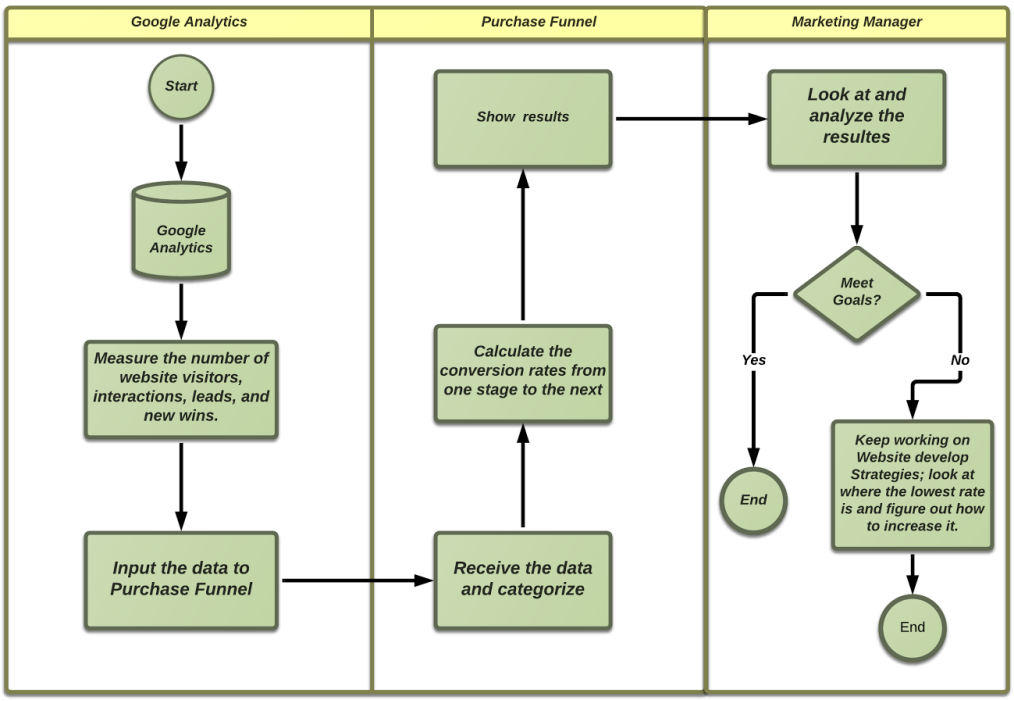
IS Appendix # : Sample Report - Purchase Funnel



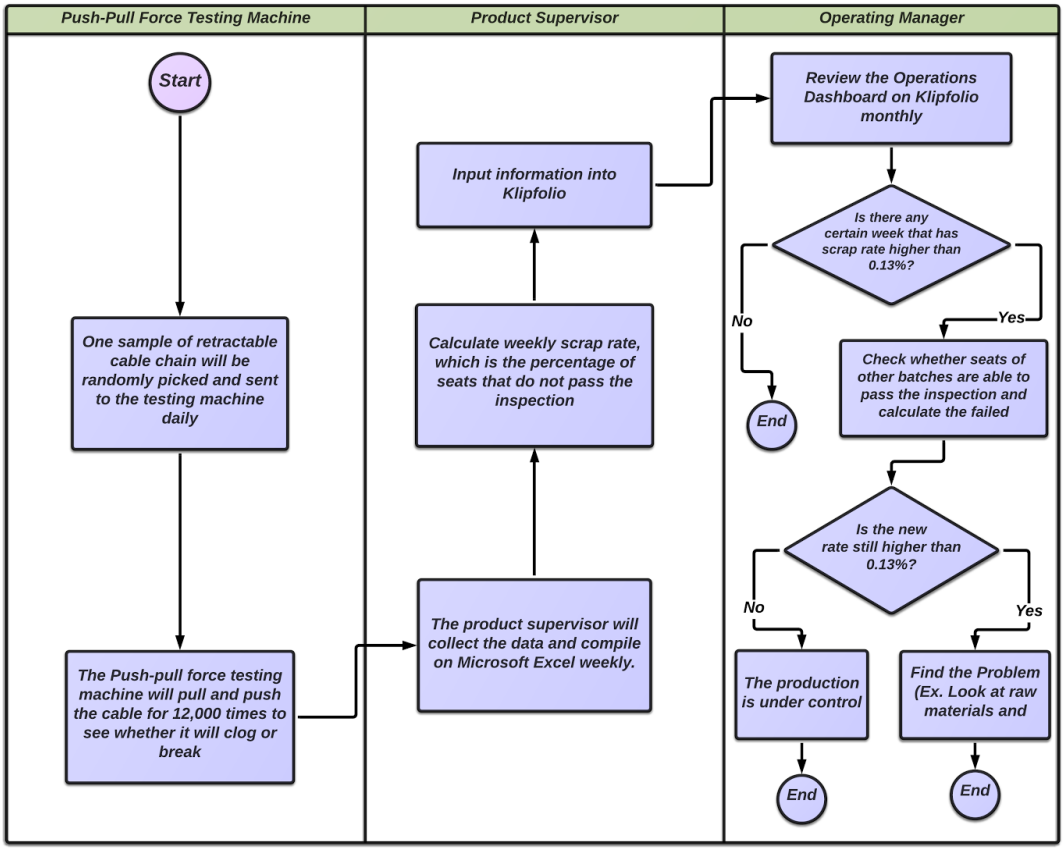
IS Appendix # : Sample Report - Inventory Turnover



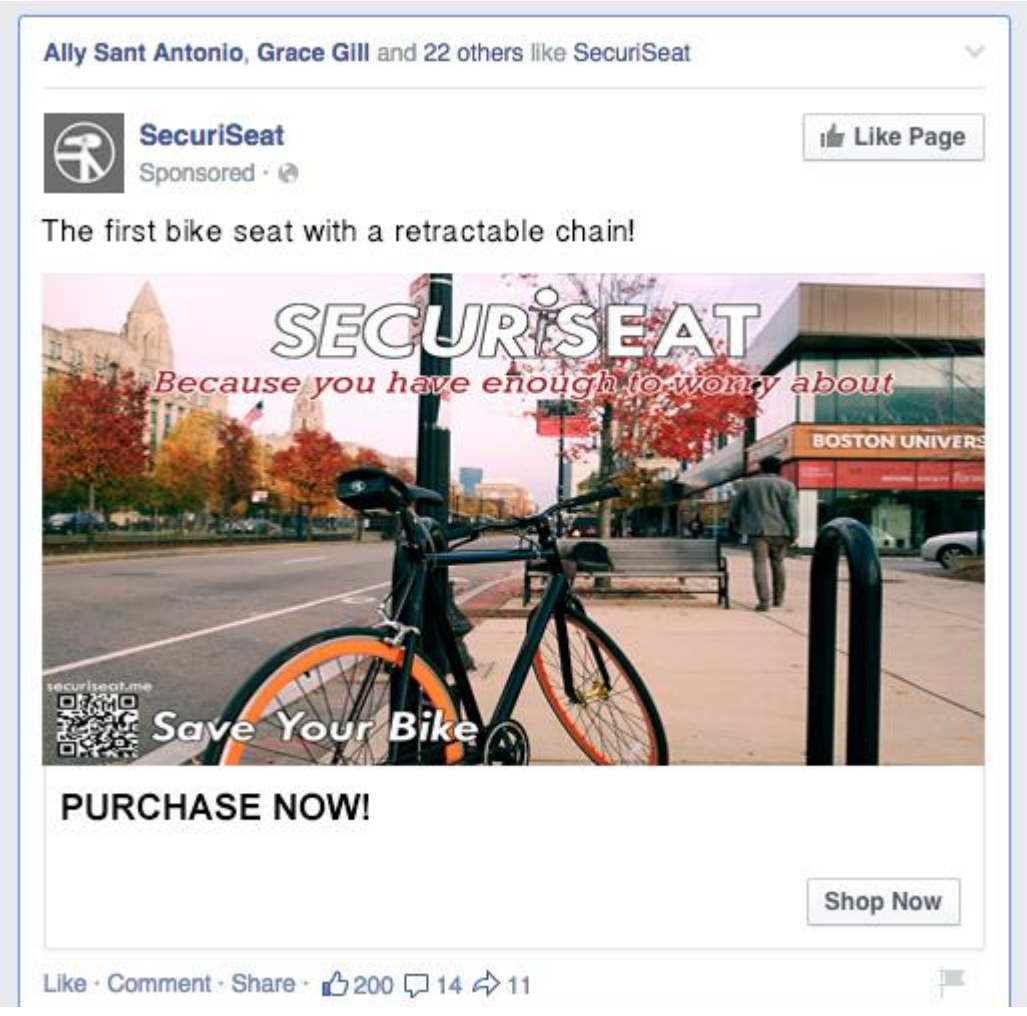
IS Appendix # : BMNP Diagram- Purchase Funnel

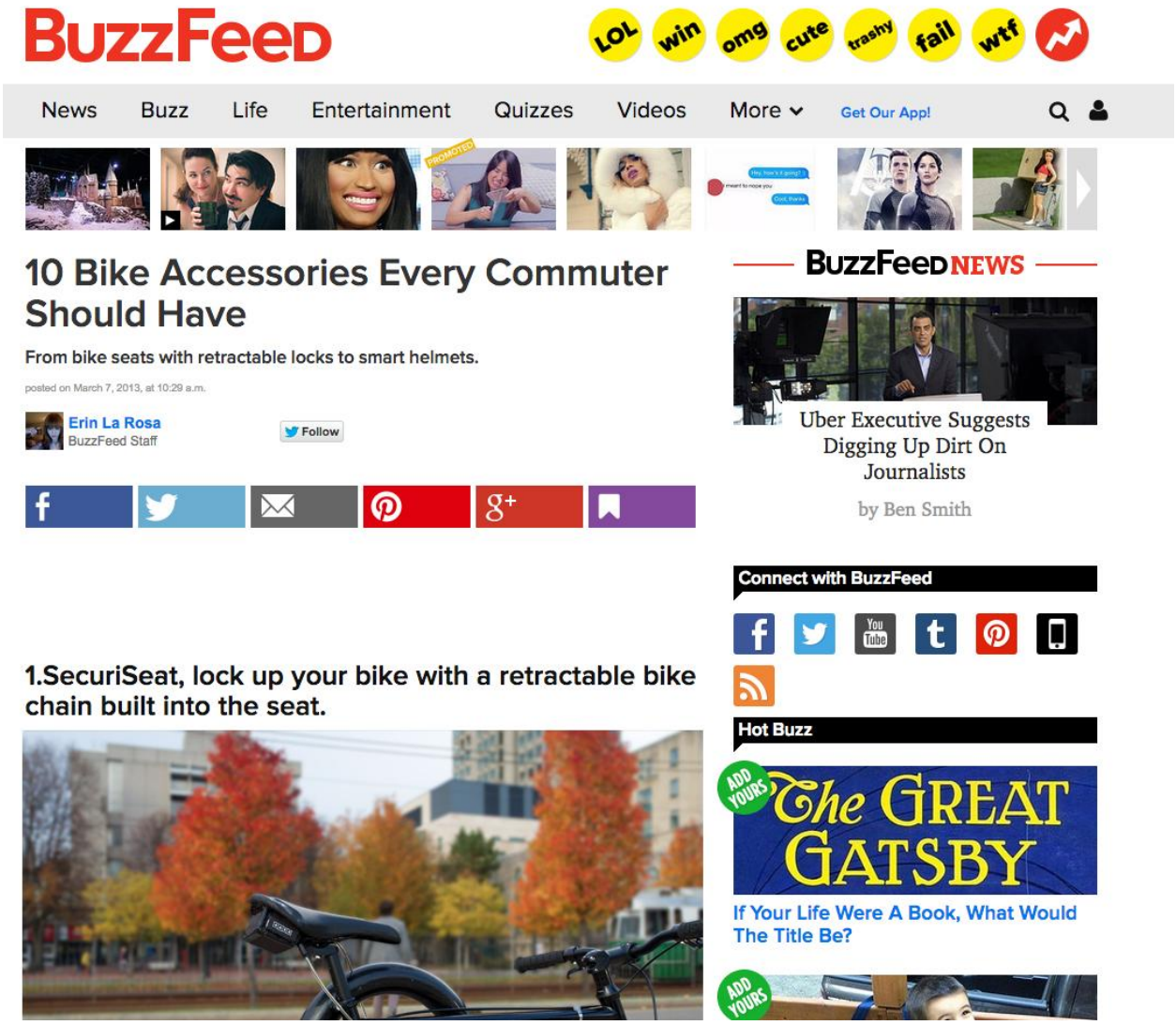


IS Appendix # : BMNP Diagram - Failed Inspection Rate


Push-Pull Force Testing Machine
Product Supervisor
Operating Manager
Start
One sample of retractable cable chain will be randomly picked and sent to the testing machine daily
The Push-pull force testing machine will pull and push the cable for 12,000 times to see whether it will clog or break
The product supervisor will collect the data and compile on Microsoft Excel weekly.
Calculate weekly scrap rate, which is the percentage of seats that do not pass the inspection
Input information into Klipfolio
Review the Operations Dashboard on Klipfolio monthly
Is there any certain week that has scrap rate higher than 0.13%?
No
End
Yes
Check whether seats of other batches are able to pass the inspection and calculate the failed
Is the new rate still higher than 0.13%?
No
The production is under control
End
Yes
Find the Problem (Ex. Look at raw materials and
End

IS Exhibit: # Facebook Marketing





IS Exhibit: BuzzFeed Marketing

IS Appendix # : ERP Decision Matrix

Criteria	Weighting	ERP Vendors Evaluation Scores		Score Based on Weightin	

			g		
		Abas USA	Xledger	Abas USA	Xledger
Information Quality	0.16	4	5	0.64	0.8
Functionality	0.15	5	4	0.75	0.6
Price	0.12	3	4	0.36	0.48
Implementation Speed	0.1	3	5	0.3	0.5
Security	0.1	5	4	0.5	0.4
Ease of Use	0.09	2	5	0.18	0.45
System Stability	0.09	5	5	0.45	0.45
Compatibility with other systems	0.08	4	3	0.32	0.24
Ease of customization	0.06	5	5	0.3	0.3
Service & Support	0.05	2	4	0.1	0.2
Sum	1			3.9	4.42

SECURISEAT

Because you have enough to worry about

Ownership and Funding

We are asking that investors initially contribute 75% of start-up expenses, while the remaining 25% will be contributed by the company's management, friends and family. In return for contributing capital, investors will gain 75% ownership of the company and management, while friends and family will acquire the rest. We believe that it is fair for everyone to receive a portion of the company equal to the percentage of the initial capital they contributed.

Initial Investment

We decided that our start-up period in year 0 would consist of the last four months of the year, with the last two months being spent producing pre-build stock for year 1. In total, we are requesting $816,125 to successfully launch our product.

Initial Investment in Fixed Assets

Of the requested amount, $135,781 will go towards initial investments in fixed assets, which are made up of the costs of production machines and tools, information system assets, and office assets.

Initial Investment in Operating Expenses

Initial operating expenses make up $504,690 of the requested amount, and consist of new product development, pre-marketing expenses and other various costs. New product development costs make up $90,000 and include the cost of designing and engineering prototypes, as well as filing patents. Pre-marketing expenses make up $30,920, which we got from estimating year 0 expenses to be approximately 15% of year 1 marketing costs. Operating expenses in year 0 also include utilities, rent and salaries, as well as information system services required to have the company running.

Initial Investment In Fixed Assets	
Balance Sheet Items	135,781
Initial Working Capital	
Cash	175,654
Initial Operating Expenses	
Product Development	90,000
Pre-Marketing Expenses	30,920
All Other	383,769
Total Initial Expense	816,125

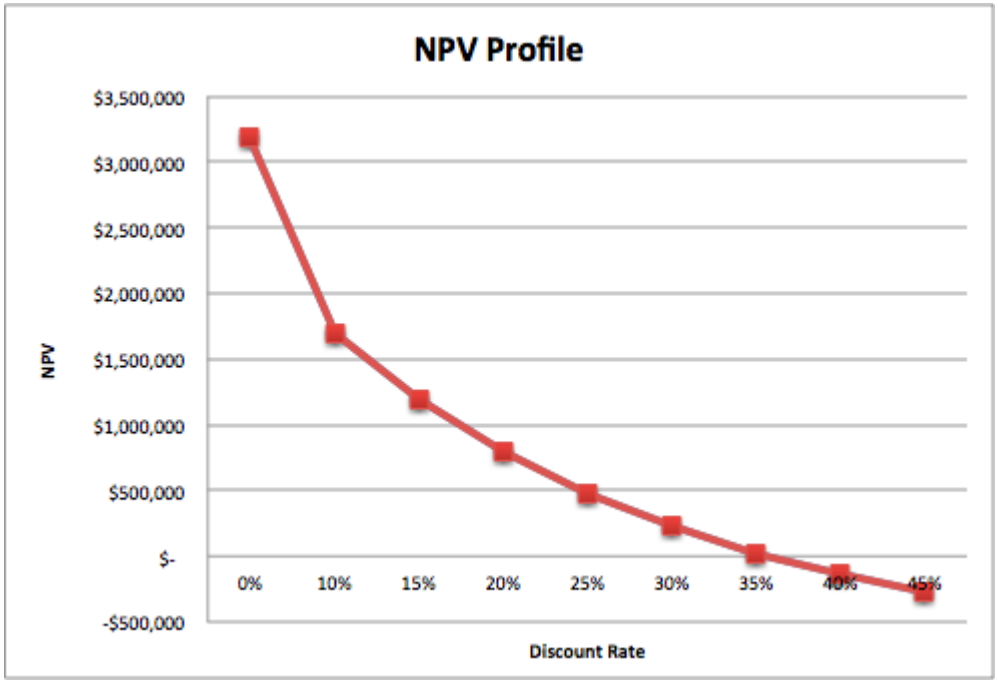
FE Exhibit 1: Initial Investments - Fixed Assets

Initial Working Capital

The initial working capital makes up the remaining $175,654, and acts a cash cushion to mitigate the risk of unexpected costs and deviations from forecasts. This cash cushion was estimated by taking 10% of the first year's projected operating expenses.

Net Present Value

Projecting five years out, we see an overall net present value of $479,995, with an internal rate of return of 36%. These values were calculated using a discount rate of 25% and the projected net cash flows for the first five years, including the firm's terminal value. The project has a positive NPV because our product generates a high gross margin, and we also keep fixed and administrative costs as low as possible. Despite the diminishing market, our high ACV and awareness climbing at around 2% each year drive our sales numbers upwards, helping us generate high revenue. In terms of managing expenses, we kept marketing expenses between 5% to 6% of revenue in years 2 through 4.



FE Exhibit 2: NPV Profile

Internal Rate of Return

With our ownership breakdown of 75% to investors and 25% to family, friends and management, an IRR of 36% will be generated for both categories[See Exhibit of IRR]. If we give our friends and family 30% of all future cash flows, they will have a 42% IRR. This will give our investors a 33% IRR. If we decide to give our friends and family 50% of the cash flows, they will have an IRR of 63% and our investors will have an IRR of 22%. We chose to set those

ownership percentages at 75% for investors and 25% for family, friends, and managers so both parties get an equal IRR, as seen in (**exhibit below__**).

Years	0	1	2	3	4	5	IRR
Total Cash Flow	($938,554)	($441,168)	$105,921	$850,192	$1,054,625	$2,552,554	
Friends & Family	25%						
Investors	(703,915)	(330,876)	79,441	637,644	790,969	1,914,416	36%
Friends & Family	(234,638)	(110,292)	26,480	212548	263,656	638,139	36%
Friends & Family	30%						
Investors	(703915)	(330,876)	52,960	425,096	527,312	1,276,277	33%
Friends & Family	(234,638)	(110,292)	52,960	425,096	527,321	1,276,277	42%
Friends & Family	50%						
Investors	(703,915)	(330,876)	74,145	595,135	738,237	1,786,788	22%
Friends & Family	(234,638)	(110,292)	31,776	255,058	316,387	765,766	63%

FE Exhibit 3: IRR

Profitability

SecuriSeat is expecting to see a net loss of almost $63,000 in year 1. However, we will see the firm become profitable in year 2, with a projected net income of just over $1.01 million. The spike in net profit is because we will cover all of the firm's initial expenses, raise awareness from 8.05% to 14.13% from years 1 to 2, and have an all-commodity volume (ACV) increase from 24.24% to 33.54%. In the following years, the company will see a decline in net income by $63,890 in year 3 and $85,427 in year 4. These decreases are attributed to target markets decreasing, very slight changes in ACV and awareness during these times, and finally adding a sales force of our own in year 3. In year 5, we see a $67,204 growth in net income from year 4 as a result of increasing marketing efforts by $759,630, raising awareness by 4.87%. Alongside the growth in awareness the firm will also start to sell in mass merchandisers, which will allow our ACV to grow 9%.

SecuriSeat's gross margin increased 13% from years 1 to 5 due to economies of scale. Cost of goods sold for each seat decreases from year to year, allowing each unit to earn a higher contribution margin. In addition to cost of goods sold decreasing, gross margin increases because

direct labor stays relatively constant since the number of employees does not change significantly from year to year.

Break-Even Analysis

In our break-even analysis, we calculated cash, NPV, and accounting break-evens for our product. We will break even in year 1 for NPV, and break even in year 2 for both cash and accounting, as seen in exhibit [whole breakeven tab___]

Cash Breakeven

Cash breakeven tells us the volume of sales needed to cover all of our operating expenses. In year 1, our breakeven units are 67,518 units, which is just over our projected unit sales of 65,757. However, the firm exceeds the units required to break even in year 2. Our margin of safety shows a negative value of $45,408 for year 1, but our sales in year 2 exceed the breakeven as well as cover the additional units that we lacked in the previous year. This in turn results in a positive margin of safety years 2 to 5.

NPV Breakeven

NPV breakeven is the required number of units sold to reach a NPV of zero. From the sales forecast, we expect unit sales to exceed the units required to break even starting from year 1. Since the forecasted units are greater than the required amounts, the margin of safety will be positive in every single year, meaning the product will have a positive NPV from the beginning.

Accounting Breakeven

Accounting breakeven even has the same concept as cash breakeven, however, it takes depreciation into account. To break even in year 1, the company needs to sell 68,857 units, but this is 3,100 more than our year 1 forecasted demand of 65,757 units. As a result, the margin of safety is a negative value of $80,110 in year 1. However in year 2, we make unit sales of 172,419 units, surpassing the year's breakeven units, making our margin of safety positive. This means the firm will start to see accounting profits starting in year 2.

Years	1	2	3	4	5
Cash Breakeven Units	67,518	83,549	99,283	101,142	151,754
Cash Breakeven Revenue	$1,744,761	$2,081,623	$2,460,591	$2,499,957	$3,620,060
Margin of Safety	$(45,508)	$2,214,169	$2,071,152	$1,908,280	$2,059,589
NPV Breakeven Units	58,023	152,140	161,346	157,370	210,089
NPV Breakeven Revenue	$1,499,394	$3,790,540	$3,998,739	$3,889,760	$5,011,634
Margin of Safety	$199,859	$505,252	$533,004	$518,477	$668,015
Accounting Breakeven Units	68,857	84,977	100,715	102,593	153,261
Accounting Breakeven Revenue	$1,779,363	$2,117,190	$2,496,065	$2,535,819	$3,656,015
Margin of Safety	($80,110)	$2,178,602	$2,035,678	$1,872,419	$2,023,634

FE Exhibit 4: Breakeven

Cash Flow

Similar to profitability, the company will observe a positive cash flow starting in year 2, which is also the same year we generate a net profit, as seen in FE Exhibit 4. The firm's accounts payable increases as we gain a reputation, while accounts receivable days decrease once retailers make us more of a priority to pay back. All of these factors combined make cash flows in the following year 2 positive. The net cash flow decreases significantly from year 4 to 5 because of the increase in net working capital, resulting from the firm's decision to enter mass merchandisers in year 5. In our projections, demand rose when we entered mass merchandisers, resulting in a need to produce more inventory. This in turn will increase our current assets, while current liabilities stay relatively stable throughout the years, resulting in a negative change in net working capital.

	Time 0	Year 1	Year 2	Year 3	Year 4	Year 5
Initial Investment in Fixed	(135,781)					
Net Income	(504,690)	(62,871)	1,011,613	947,723	862,296	929,500
+Depreciation	-	27,156	27,525	27,525	27,525	27,525
-Change in Net Working Ca	(298,083)	(405,453)	(931,373)	(125,056)	164,804	(594,871)
-Change in Fixed Assets	-	-	(1,845)	-	-	-
Net Cash Flow	(802,773)	(441,168)	105,921	850,192	1,054,625	362,154
Terminal Value of Business						2,190,400
Total Cash Flow	(938,554)	(441,168)	105,921	850,192	1,054,625	2,552,554

FE Exhibit 5: Cash Flow

Sensitivity

We ran a sensitivity analysis on four variables; terminal value, awareness and ACV, fixed production costs, and information systems expenses.

Terminal Value

As you can see from the exhibit, we found a sensitivity of 33.13%, giving us a terminal value of $725,572 to make our NPV equal to zero. The terminal value is one of our less sensitive variables, as it needs to be a third of its current value to make the NPV drop to zero.

Awareness and ACV

SecuriSeat's awareness and ACV both gave us a sensitivity of of 87.9% which makes them the most sensitive variables. If awareness and ACV values are 87.9% of their current value, our NPV will be equal to zero. With this knowledge, we are pushing to make sure that we are spending as much as we can on marketing strategies to keep awareness and ACV high. It will need to be high enough to help keep our NPV positive, but cannot be so high as to cause expenses to outweigh benefits.

Fixed Production Costs

For our other two sensitivity variables, we chose to look at fixed production cost and information systems expenses. Fixed production cost is one of our largest expenses, consisting of indirect materials and labor, manufacturing facilities, equipment, IT, utilities, and insurance, making it a potential factor to affect our NPV. However, results showed that fixed production was a low sensitivity variable, requiring it be 201.64% of its current value to bring down NPV.

Information Systems Expenses

Analyzing our information systems expense allows the company to see the tradeoff between this expense and net present value telling us how much more we can pay to acquire

better software systems. Our expense would have to be 682.86% of our expenditures, indicating that the firm can be very flexible with its information system upgrades before our NPV is brought down to zero.

Competition Adjustment

For our competiton adjustment, we will assume no competition until year 3. When our competitors enter, we will assume that they will take over 20% of our sales. In the next year, competition grows another 10%, and an additional 5% in the following year. When we ran our sensitivity analysis, we got a percentage of 163%, which meant that if our competition inflates to 163% each year, our NPV will be equal to zero. We also believe that this is not an accurate representation because NPV will be more sensitive to competition. If the competition grows at a faster rate, it will decrease our NPV to zero even more quickly.

	Percentage	Breakeven Value	Time 0	Year 1	Year 2	Year 3	Year 4	Year 5
Terminal Value	33.13%	$725,572						
Awareness	87.90%							
Primary Target Market				5.54%	10.76%	13.81%	15.12%	17.06%
Second Target Market				8.61%	14.08%	16.59%	17.90%	24.52%
ACV	87.90%			21.31%	29.49%	30.98%	31.83%	39.83%
Fixed Production Costs	201.64%			$505,276	$513,139	$520,970	$528,780	$537,427
IS Expense	682.86%		$276,557	$209,334	$295,429	$338,476	$381,865	$425,254
Competition Adjustment	163.23%			0.00%	0.00%	32.65%	48.97%	57.13%

FE Exhibit 6: Sensitivity Analysis

Comparable Companies Analysis

The comparables that we chose are Black Diamond Inc. and Columbia Sportswear. We looked at Columbia Sportswear as our distribution comparable and Black Diamond Inc. as our COGS comparable company, both of which are in the sporting goods industry. On average, these companies have a days receivables of 65. For our own company, our days receivable will be slightly higher because as a startup company, we do not have as much negotiation power as our competitors. In year 1, our days receivable will be 91 days, as shown in the Financial Ratios

[Exhibit___]. As years go on, we will build better relationships with our distribution channels and customers, which will gradually decrease our days receivable to 77 days in year 5. We believe eventually we will have a similar days receivable to our competitors.

Our comparables have payable days of at least 45 days, which means that creditors will allow them to process payments up to 45 days after the initial transaction. As a startup company, we again do not have a high level of negotiating power with our creditors making our days payable in year one will be 29 days. As we build our relationships with our creditors, our days payable will increase to 44 days in year 5.

Comparables' days inventory are also significantly higher than ours. As a startup company, we will have a high inventory turnover, unlike our comparables who have established presences in the industry. In the future, we will observe a lower inventory turnover rate and longer days inventory because of a more stable forecasted demand.

	2013		2012		2011	
	BDE	COLM	BDE	COLM	BDE	COLM
Days Receivable	72.49	66.47	64.17	73.07	56.88	75.74
Days Payable	44.26	67.31	74.53	54.4	65.67	56.72
Days Inventory	157.14	127.64	203.86	139.14	192.4	139.03

SecuriSeat					
Years	1	2	3	4	5
Days Receivable	91	84	84	77	77
Days Payable	29	37	37	44	44
Days Inventory	94	101	112	109	142

FE Exhibit 7: Comparable Companies

Discount Rate

We used ten year treasury bonds to find our risk free rate of 2.32%. We estimated the Beta for SecuriSeat by averaging the Betas of both Black Diamond Inc. and Columbia Sportswear Company, giving us 1.1. We decided to use S&P500's market rate in identifying our interest rate, giving us a rate of 8.07%. With these in mind, we found our reasonable expected rate of return, also known as the discount rate to value our project, to be 8.645%. (2.32%+1.1*(8.07%-2.32%)=8.645%. [footnotes]

risk free risk: http://www.marketwatch.com/investing/bond/10_year

sp 500: http://quicktake.morningstar.com/index/IndexCharts.aspx?Symbol=SPX

Black Diamond Inc.: 0.91

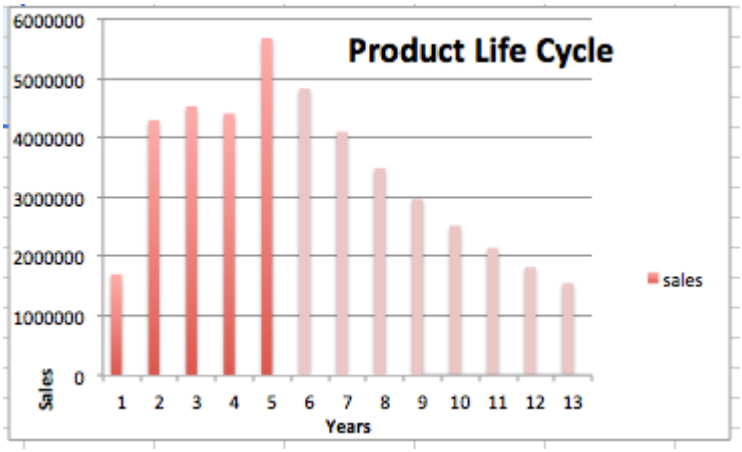
http://finance.yahoo.com/echarts?s=BDE+Interactive#%7B%22range%22%3A%2210y%22%2C%22scale%22%3A%22linear%22%7D

Columbia Sportswear Company:

1.29 http://finance.yahoo.com/q;_ylt=Au2Ifq2icxOW7XBz1twGUfF.FJF4?uhb=uhb2&fr=uh3_finance_vert_gs&type=2button&s=COLM%2C

Terminal Value and the Product Life Cycle

Looking at the growth of our target market, analyzing sales, and our current ACV and awareness levels, we assumed that at year 5 SecuriSeat will be in its maturity stage of the product life cycle. Although our sales increases from year 4 to 5, future growth will get increasingly harder. This is because ACV and awareness are already at 45% and 24% respectively. It is unlikely that ACV will increase much more and awareness will require a lot of funding to increase even by 1%. The total target market also decreases by approximately 135,000 people per year between the years 2 to 5, and even though the market has an increase of 2% in both segments, the increase is too small to make up for the loss. Net income is also decreasing from year to year, only increasing in year 5 because of expansion into mass merchandisers. Lastly, since our product is not very complex, and is easy to replicate or improve, competition will increase each year, lowering our future sales.



FE Exhibit 8: Product Life Cycle

Liquidation

We decided to calculate terminal value by liquidating the company based on the analysis of what stage of the product life cycle SecuriSeat would be in year 5. Because SecuriSeat would be in its maturity stage, sales in year 6 would decrease by around 15% as we increased

competition adjustment by 10%. In year 6, we would have to replace worn out manufacturing machines, resulting in additional costs that our firm would not be able to cover. The opportunity cost is $319,813, by estimating year 6 cash flows and subtracting the cost of capital. In addition, if we liquidate, our terminal value will increase net cash flow by $2,190,400.

Risks and Mitigation Tactics

As a startup, we will have many risks that could hinder the growth of our business, consisting of:

- ACV sensitivity: risk of retailers not accepting our product.
- Awareness sensitivity: not producing enough product awareness
- Change in consumer perception: general market reluctance for cable chains, where actual demand does not match our forecast.
- Our materials are outsourced, giving us less control
- General risk of most suppliers located in China.
- Suppliers producing our main subassembly, not currently offered in the market
- Legal risk of product failures
- Dependence on marketing strategies to generate sales and maintain positive cash flows.

Top Risks Analysis

Taking into account the sensitivity analysis, we estimated the risk of retailers not accepting our product as one of our highest risks. An ACV of 87.90% shows a close tie between retailer acceptance and the overall success of the company. In particular, we acknowledge that mass merchandisers and chain stores could reject our product. Striving to mitigate this risk we mainly focused our sales strategy on targeting independent stores and online sales. In the bicycle industry these distribution channels show a larger market share in terms of dollar sales. We also came out with marketing techniques to enforce our pull strategy and differentiate our product.

From the sensitivity analysis we also concluded that our company depends highly on the awareness that we are able to raise. To manage this risk we came up with creative marketing techniques such as various bicycle events, an engaging website and aggressive social media campaigning. In year 5 we will allocate over one million dollars to marketing expenses.

Another potential risk for our product is a general market reluctance towards cable chains and a growing shift towards U-locks. However after various interviews, focus groups, and surveys we have obtained encouraging responses about cable chains. We received feedback from

a diverse group of people from different places within the US and were pleased to hear that cable chains are still considered a safe option to secure bikes. Thus, we do not expect to experience as great of a consumer reluctance towards cable chains as we originally thought.

The fact that most of our materials are outsourced from China and that we may experience lower levels of control over our orders also present risks to the firm. Our main subassembly part is not currently offered on the market, but after researching and leveraging relations with a particular company, they agreed to customize one specifically for our product. This presents a risk in finding an equivalent or back up supplier for this unique cable lock. In order to mitigate this risk we are carrying out intensive quality control not only concerning the final product but also involving our incoming raw materials. Our CEO will work on building close relationships with suppliers in order to receive the highest quality materials possible. We also researched and communicated with possible back-up options to supply a custom cable both domestically and in China.

Base Case

As seen in FE Exhibit 9, our scenario testing calculations, simply changing a few variables had quite a large impact on the financials of our company. For our base case, company projected cash flows gave us a 36% internal rate of return, as well as a positive net present value of $479,995. The other key output from our base case calculations to note was the terminal value, which ended up at $2,190,400. Although we show negative cash flows in year 1, the constant growth thereafter is evident in our financial projections through year 5. A large part of this is attributed to our marketing strategies. Due to increasing competition, a declining target market, and machine replacement costs, we will liquidate in year 5 as the payoff of liquidation is the most profitable alternative.

Scenario Testing- Outputs			
	IRR	NPV	Terminal Value
Base Case	36%	$ 479,994.83	$ 2,190,400.13
Optimistic Case	60%	$ 1,820,535.31	$ 2,989,419.62
Pessimistic Case	1%	$ (928,886.50)	$ 1,736,810.77

FE Exhibit 9: Scenario Testing

Optimistic Case

For our scenario analysis, we modified a few different variables in order to see their effects on our financials. That being said, we had to carefully choose which variables to change, as well as how much to change them by. We changed a few minor variables, decreasing both our hourly wage rate and benefits package, but there were some other adjustments that had larger impacts on our financials. In our optimistic case, our trial rates for each year were considerably higher than our base case numbers. This was in part due to an increased awareness we were able to find by ssuming it will take a person seeing a SecuriSeat ad a total of three times to become aware of our product rather than four. The other key driver of our increased trial rate came from ACV. For pessimistic case, we assumed that Securiseat would be sold in stores with higher market share and also that our retail acceptance rate would be 40%, instead of base case's 30%. We also decreased our competition adjustment by 5% in years 3 through 5, which drove sales and overall profits higher. After all of the optimistic changes being made, we projected a 60% internal rate of return, with a positive net present value of $1,820,535 and terminal value of $2,989,420.

Pessimistic Case

For our pessimistic projections, we simply used optimistic assumptions and reversed them in the opposite direction. Starting with compensation, our hourly wage and benefits package was now increased, raising our yearly costs. We next used the assumption that it would take consumers five times seeing our ads to develop an impression, dropping our level of awareness. In our ACV calculations, we assumed SecuriSeat would feature in stores with less market share and that retailer acceptance rate would drop down to a low 20%. In both base and optimistic ACV calculations, we held a constant 12% ACV from online sales, but for pessimistic case, we lowered it to 10%. These changes had a large enough financial impact on our sales projections, pulling our numbers down considerably to the point where we decided to liquidate in year 3. The pessimistic internal rate of return is a staggering 1%, with a negative net present value of $928,887. Our terminal value at the end of year 2 would be $1,369,335 with a paid-in-capital balance of over four million dollars. Examining these characteristics points us to considering liquidations as our only option.

Invest in SecuriSeat

We believe the SecuriSeat to be a revolutionary idea as well as a good investment combining security with convenience. We have low barriers to entry in this market are a

breakthrough design in the industry. Through an aggressive marketing campaign, we will be able to propel awareness of our SecuriSeat and bring in annual revenues of $5,679,649 by year 5.

We will have a positive NPV resulting from positive cash flows, our polished marketing campaign, and optimal operating costs. We will need an initial investment of $938,554 and an additional investment in year 1 of $441,168, totaling to a $1,379,722 investment required. With high revenues along side high gross margins, our company will see accounting profitability in starting in year 2, allowing the firm to cover all initial costs and results in an IRR greater than the discount rate we used of 25%. We divided up our investment asking for 25% from friends, family, and management and 75% from investors. This will provide equal internal rates of return of 36% for both entities after year 2. Our cash flows will be positive, and we will start generating income at this point. Our overall project has a net present value of $479,995 and an internal rate of return of 36%. In our optimistic case scenario however, we expect to see a project net present value of $1,820,535 with an IRR of 60%.

CONCLUSION

SecuriSeat recognizes that the cycling community will continue to grow at a stable rate as society as a whole adapts to a more environmentally-conscious and health-driven lifestyle.

At SecuriSeat, we recognize that bicycling is an activity that people will always enjoy. That being said, we feel that SecuriSeat provides consumers with a new alternative for locking their bikes that offers convenience, security and ergonomics built into one product. We recognize that there are issues bikers face when locking up which include forgetting or losing their keys, the inability to lock their frame in addition to wheels, and lastly protecting seats from theft.

SecuriSeat aims to undercut these issues by tying the three together and offering a design that will perform and solve each in order to "*Save Your Bike*".

Integrating company functions, outside of this design endeavor, engage all sects of our business including marketing, information systems, operations and finance, encouraging interdepartmental collaboration essential to the success of our business.

APPENDIX

SECURISEAT

Because you have enough to worry about

MK Appendix 1: Market Research Process

Learned from original one-on-one interviews:

Originally wanted to segment casual vs serious bikers

Landry's interview indicated that serious bikers have a more specialized seat just for racing, which is not what we are making

Racers do not have a need for locks

Found that there was a problem understanding our product

People are getting the wrong idea that the seat can be easily removed

Also choosing prices they will pay at a too low price because they do not know the current price of a bike seat

Found that many people are concerned with the comfort of the bike seat

Must look comfortable since people cannot test seats before they buy it

We modified the design by adding a concavity in the seat that adds to the ergonomics of the seat.

Learned from Focus Group:

Change name from safety seat to SecuriSeat (also from professor feedback)

Majority of people owned cable locks even in suburban areas

Suburban areas have a tendency to not need bicycle because safe neighborhood

Learned from Survey:

Suburban are willing to pay more for our product but there is a lower purchase intent

People are willing to buy more than one for family and friends

Most people expected our product to be sold online and at specialty sporting goods stores

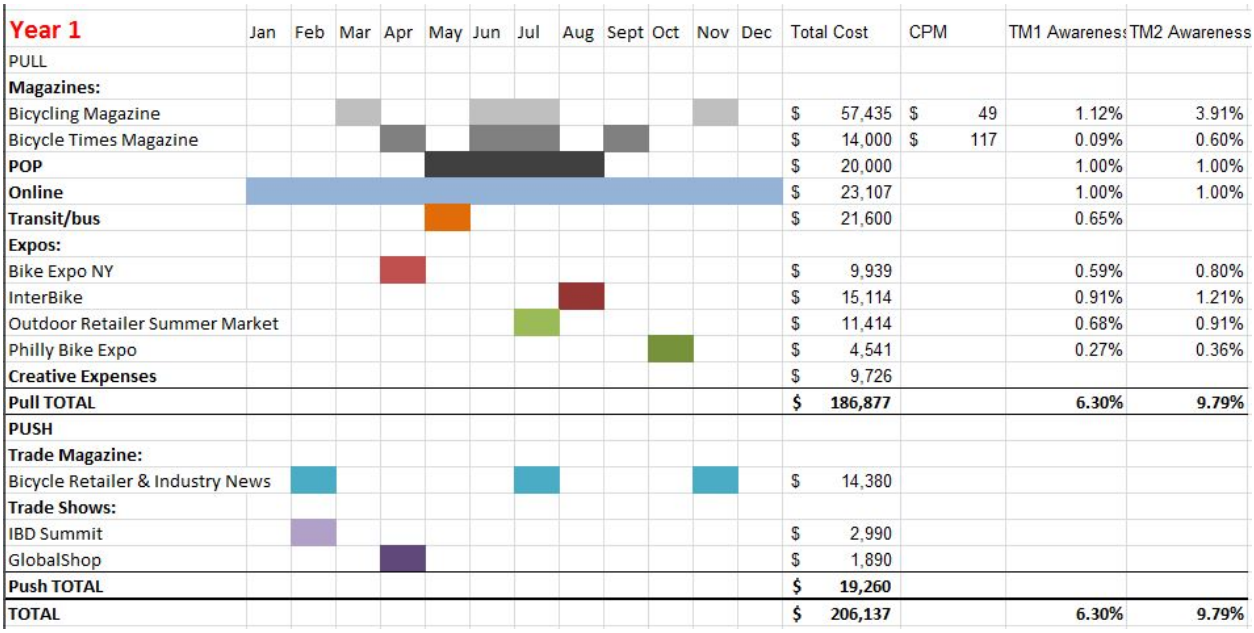
MK Appendix 2: Segmentation Grid

Segment Name	Frequent bikers in SubUrban setting	Frequent bikers in Urban setting	(Serious) Competition bikers	Infrequent Casual bikers
Demographics	Age 18-54	Age 18-54	Age 18-54	Age 18-54
Psychographics	Family-oriented, health conscious, environmentally conscious	Career-oriented, trying to avoid traffic, environmentally conscious	Focused on winning competition, buy only top quality products	Only for occasionally going out with friends, not concerned with specialized bike
Segment Size	12 Million	26 Million	17.27 Million	6.12 Million
Other products segment buys	Technology, luxury items, brand clothes, furniture	Groceries, clothing, technology	Luxury items, furniture, vacations, technology	Clothing, technology,
Determinant product attributes & benefits sought	Easy to use, stylish, good quality,	Sturdy, prevents theft, easy to use, stylish	Specialized to user, lightweight	Cheap, does the job
Maximum price segment will pay	$70	$40	$100	$10
Segment's Information sources & Social Influences	Television, newspaper, internet, co-workers, friends	Internet, television, friends, co-workers	Bike magazines, online forums	Friends, internet
Best distribution outlets to reach segment	National sporting good stores (Sports Authority, Dicks)	Specialized local sporting stores (Landrys), online	Cycling stores, online	Walmart, Kmart, Home Depot
Best media to reach segment	Television, Internet	Television, Internet, advertisements in high traffic areas (subway)	Race websites, sponsorship of cyclists or races	Sunday Times ad, Television, Internet

MK Appendix 3: IMC - Year 0

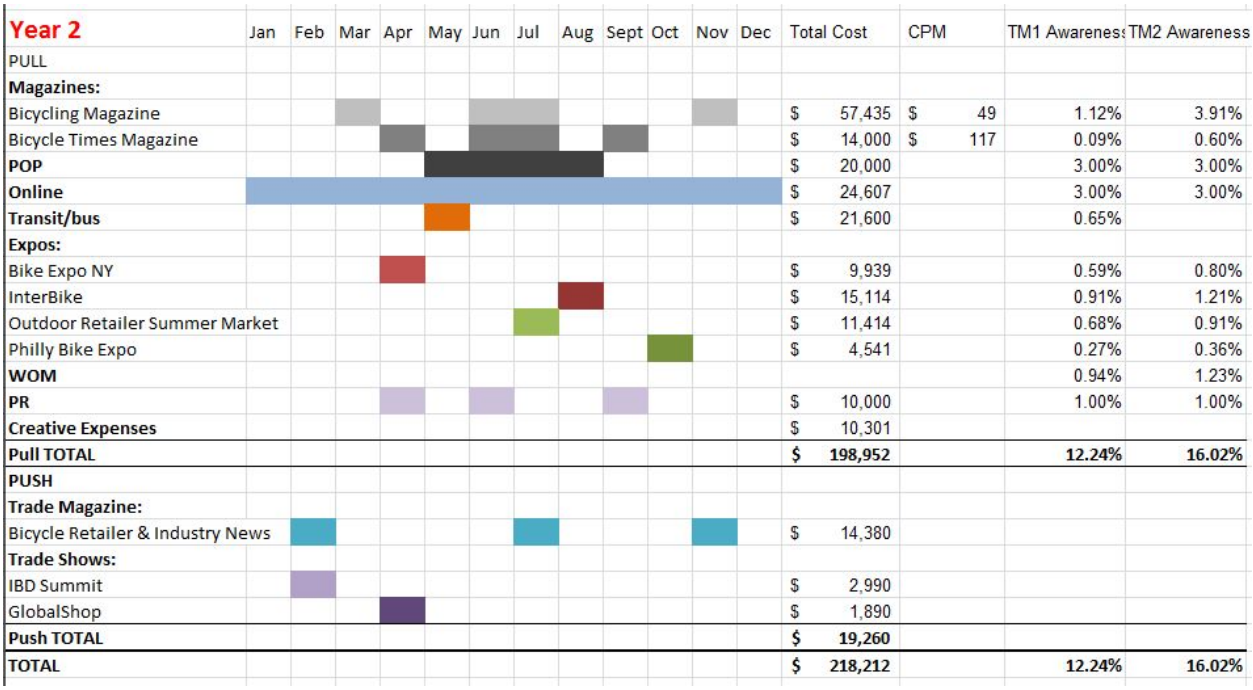
Year 0	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total Cost	CPM	TM1 Awareness	TM2 Awareness
PUSH																
Trade Magazine:																
Bicycle Retailer & Industry News													$ 14,380	n/a	n/a	n/a
Trade Shows:																
IBD Summit													$ 2,990			
GlobalShop													$ 1,890			
Push TOTAL													**$ 19,260**			
TOTAL													**$ 19,260**		0.00%	0.00%

MK Appendix 4: IMC - Year 1



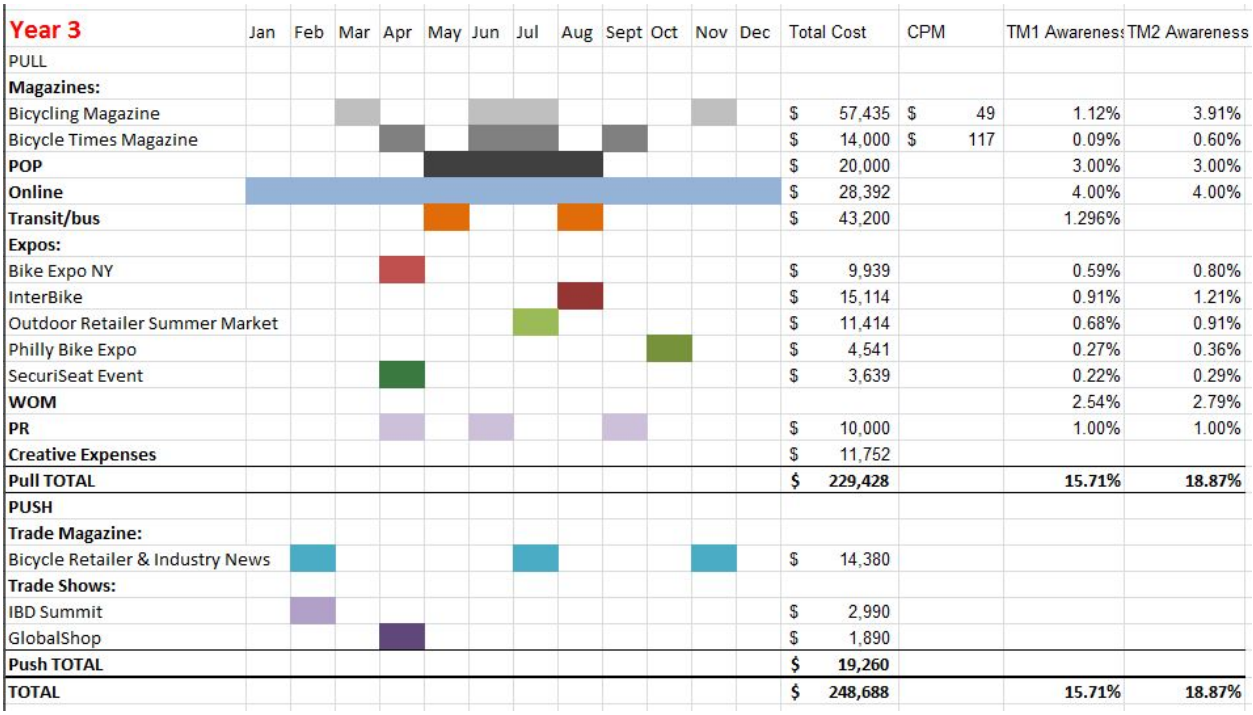
Year 1	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total Cost	CPM	TM1 Awareness	TM2 Awareness
PULL																
Magazines:																
Bicycling Magazine													$ 57,435	$ 49	1.12%	3.91%
Bicycle Times Magazine													$ 14,000	$ 117	0.09%	0.60%
POP													$ 20,000		1.00%	1.00%
Online													$ 23,107		1.00%	1.00%
Transit/bus													$ 21,600		0.65%	
Expos:																
Bike Expo NY													$ 9,939		0.59%	0.80%
InterBike													$ 15,114		0.91%	1.21%
Outdoor Retailer Summer Market													$ 11,414		0.68%	0.91%
Philly Bike Expo													$ 4,541		0.27%	0.36%
Creative Expenses													$ 9,726			
Pull TOTAL													**$ 186,877**		**6.30%**	**9.79%**
PUSH																
Trade Magazine:																
Bicycle Retailer & Industry News													$ 14,380			
Trade Shows:																
IBD Summit													$ 2,990			
GlobalShop													$ 1,890			
Push TOTAL													**$ 19,260**			
TOTAL													**$ 206,137**		**6.30%**	**9.79%**

MK Appendix 5: IMC – Year 2



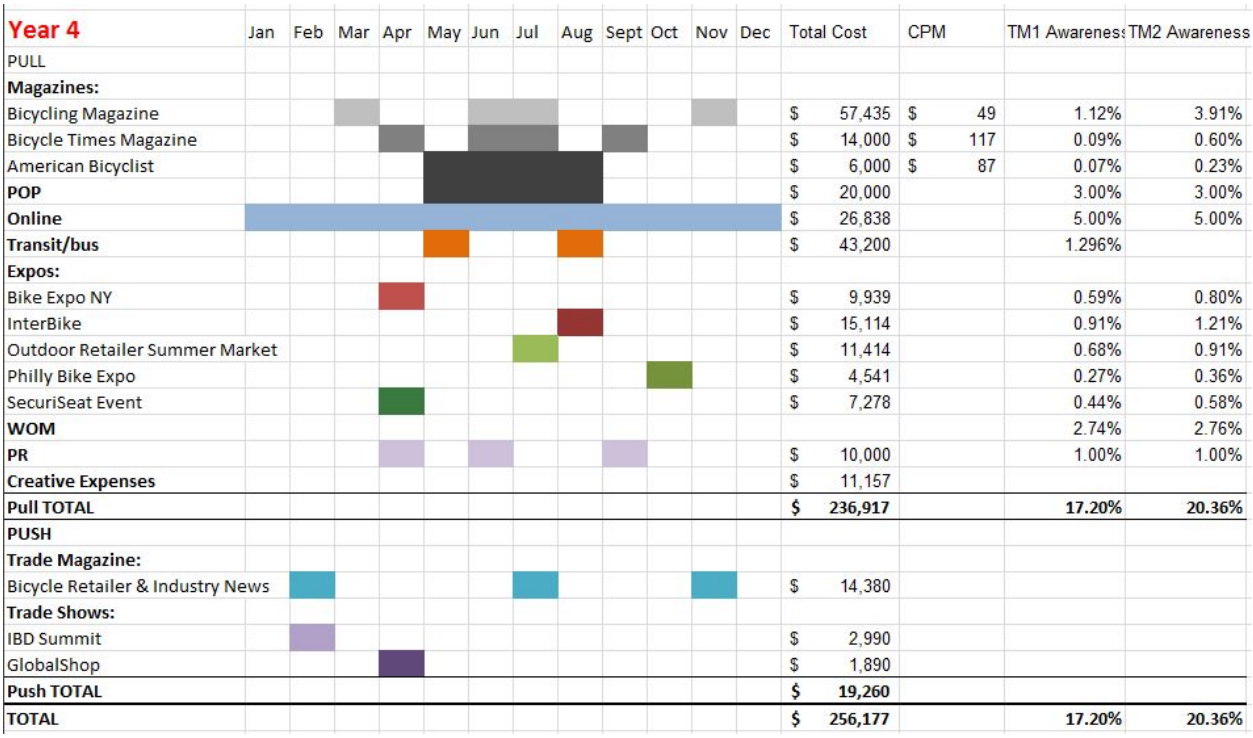
Year 2	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total Cost	CPM	TM1 Awareness	TM2 Awareness
PULL																
Magazines:																
Bicycling Magazine													$ 57,435	$ 49	1.12%	3.91%
Bicycle Times Magazine													$ 14,000	$ 117	0.09%	0.60%
POP													$ 20,000		3.00%	3.00%
Online													$ 24,607		3.00%	3.00%
Transit/bus													$ 21,600		0.65%	
Expos:																
Bike Expo NY													$ 9,939		0.59%	0.80%
InterBike													$ 15,114		0.91%	1.21%
Outdoor Retailer Summer Market													$ 11,414		0.68%	0.91%
Philly Bike Expo													$ 4,541		0.27%	0.36%
WOM															0.94%	1.23%
PR													$ 10,000		1.00%	1.00%
Creative Expenses													$ 10,301			
Pull TOTAL													**$ 198,952**		**12.24%**	**16.02%**
PUSH																
Trade Magazine:																
Bicycle Retailer & Industry News													$ 14,380			
Trade Shows:																
IBD Summit													$ 2,990			
GlobalShop													$ 1,890			
Push TOTAL													**$ 19,260**			
TOTAL													**$ 218,212**		**12.24%**	**16.02%**

MK Appendix 6: IMC - Year 3



Year 3	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total Cost	CPM	TM1 Awareness	TM2 Awareness
PULL																
Magazines:																
Bicycling Magazine													$ 57,435	$ 49	1.12%	3.91%
Bicycle Times Magazine													$ 14,000	$ 117	0.09%	0.60%
POP													$ 20,000		3.00%	3.00%
Online													$ 28,392		4.00%	4.00%
Transit/bus													$ 43,200		1.296%	
Expos:																
Bike Expo NY													$ 9,939		0.59%	0.80%
InterBike													$ 15,114		0.91%	1.21%
Outdoor Retailer Summer Market													$ 11,414		0.68%	0.91%
Philly Bike Expo													$ 4,541		0.27%	0.36%
SecuriSeat Event													$ 3,639		0.22%	0.29%
WOM															2.54%	2.79%
PR													$ 10,000		1.00%	1.00%
Creative Expenses													$ 11,752			
Pull TOTAL													**$ 229,428**		**15.71%**	**18.87%**
PUSH																
Trade Magazine:																
Bicycle Retailer & Industry News													$ 14,380			
Trade Shows:																
IBD Summit													$ 2,990			
GlobalShop													$ 1,890			
Push TOTAL													**$ 19,260**			
TOTAL													**$ 248,688**		**15.71%**	**18.87%**

MK Appendix 7: IMC - Year 4



Year 4	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total Cost	CPM	TM1 Awareness	TM2 Awareness
PULL																
Magazines:																
Bicycling Magazine													$ 57,435	$ 49	1.12%	3.91%
Bicycle Times Magazine													$ 14,000	$ 117	0.09%	0.60%
American Bicyclist													$ 6,000	$ 87	0.07%	0.23%
POP													$ 20,000		3.00%	3.00%
Online													$ 26,838		5.00%	5.00%
Transit/bus													$ 43,200		1.296%	
Expos:																
Bike Expo NY													$ 9,939		0.59%	0.80%
InterBike													$ 15,114		0.91%	1.21%
Outdoor Retailer Summer Market													$ 11,414		0.68%	0.91%
Philly Bike Expo													$ 4,541		0.27%	0.36%
SecuriSeat Event													$ 7,278		0.44%	0.58%
WOM															2.74%	2.76%
PR													$ 10,000		1.00%	1.00%
Creative Expenses													$ 11,157			
Pull TOTAL													**$ 236,917**		**17.20%**	**20.36%**
PUSH																
Trade Magazine:																
Bicycle Retailer & Industry News													$ 14,380			
Trade Shows:																
IBD Summit													$ 2,990			
GlobalShop													$ 1,890			
Push TOTAL													**$ 19,260**			
TOTAL													**$ 256,177**		**17.20%**	**20.36%**

MK Appendix 8: IMC - Year 5

Year 5	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total Cost	CPM	TM1 Awareness	TM2 Awareness
PULL																
Magazines:																
Bicycling Magazine													$ 57,435	$ 49	1.12%	3.91%
Bicycle Times Magazine													$ 14,000	$ 117	0.09%	0.60%
American Bicyclist													$ 6,000	$ 87	0.07%	0.23%
Fitness													$ 640,320	$ 153	2.46%	8.61%
Online													$ 122,886		7.00%	7.00%
Transit/bus													$ 43,200		1.296%	
Expos:																
Bike Expo NY													$ 9,939		0.59%	0.80%
InterBike													$ 15,114		0.91%	1.21%
Outdoor Retailer Summer Market													$ 11,414		0.68%	0.91%
Philly Bike Expo													$ 4,541		0.27%	0.36%
SecuriSeat Event													$ 7,278		0.44%	0.58%
WOM															2.70%	2.68%
PR													$ 10,000		1.00%	1.00%
Creative Expenses													$ 48,372			
Pull TOTAL													**$ 990,500**		**18.61%**	**27.89%**
PUSH																
Trade Magazine:																
Bicycle Retailer & Industry News													$ 14,380			
Trade Shows:																
Health and Fitness Business													$ 6,047			
IBD Summit													$ 2,990			
GlobalShop													$ 1,890			
Push TOTAL													**$ 25,307**			
TOTAL													**$ 1,015,807**		**18.61%**	**27.89%**

MK Appendix 9: Urban Magazine Advertisement

MK Appendix 10: Suburban Magazine Advertisement

MK Appendix 11: Business Card Design

MK Appendix 12: Informational Brochure Design

SecuriSeat, providing a convenient and secure way to protect your bike from theft.

Locations

Where can you purchase our product?

You can find our product online through our website or in stores at the following retailers:

DICK'S SPORTING GOODS · SPORTS AUTHORITY · REI · LANDRY'S BICYCLES SINCE 1922 • LANDRYS.COM · SLC Bicycle Co.

Contact Us

Phone: (221)-458-7854
Email: Info@securiseat.com
Web: Securiseat.me

Scan me!

SECURISEAT
2821 West Parkway Blvd
West Valley, UT 84120

SECURISEAT

Save Your Bike

Our Product

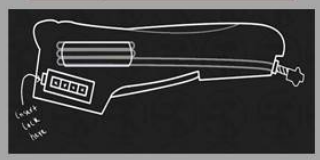
What is a SecuriSeat?

The SecuriSeat is a bike seat with a 4-digit combination lock incorporated into the bottom of the seat. The seat is universally adaptable to any bike. No more will you ever have to worry about:

- Forgetting your bike lock
- Forgetting the keys to your lock
- Having to lug around a heavy bike lock
- Having an uncomfortable bike seat

How does it work?

We have strategically placed a mechanism under your seat to hold your bike's cable chain when not in use. When needed, just pull on the cord, wrap it securely around your bike and lock it back into the end of the seat. It uses a 4-digit combination so there is no need for keys!



Highest Quality Materials

To ensure customer satisfaction, we have only used the best of the best materials so that you and your heinie will have a pleasurable biking experience.

Giving Back

Our company is greatly concerned about the environment and makes sure we do our part to reduce our carbon footprint. We strive to be an environmentally responsible and sustainable company.

Our product is made with **recycled materials** so you can ride with peace of mind.

Never worry about leaving your bike vulnerable in public again.

More than just a seat

Not only is our company environmentally friendly, but we also actively participate in the biking community.

We sponsor events for various charities and promote the use of biking to end child obesity as well as reducing carbon emissions on the environment.

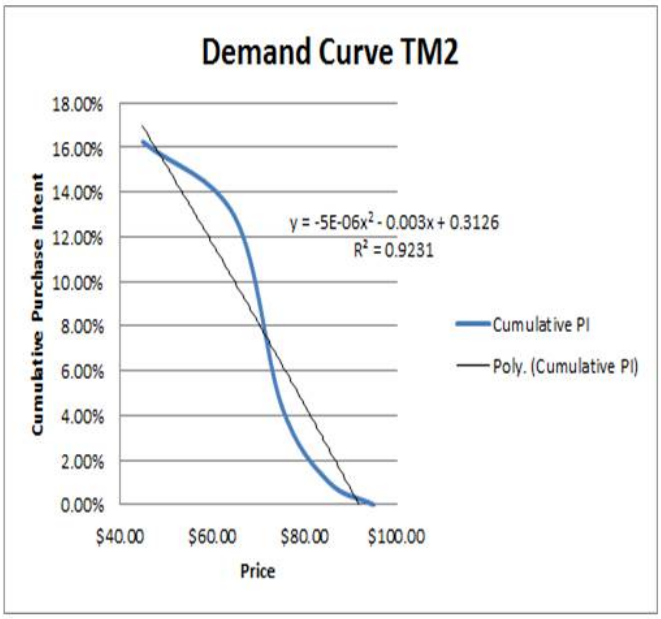
Our company works closely with **The International Bike Fund**, an organization that provides resources for bicycle transportation for underdeveloped countries worldwide.

When you buy our product, you have the option to donate your old seat to this organization!

If you are interested in other biking events, please check out our website at the back of this pamphlet!

MK Appendix 13: Demand Curve - Urban Segment

Secondary Target Market: Suburban



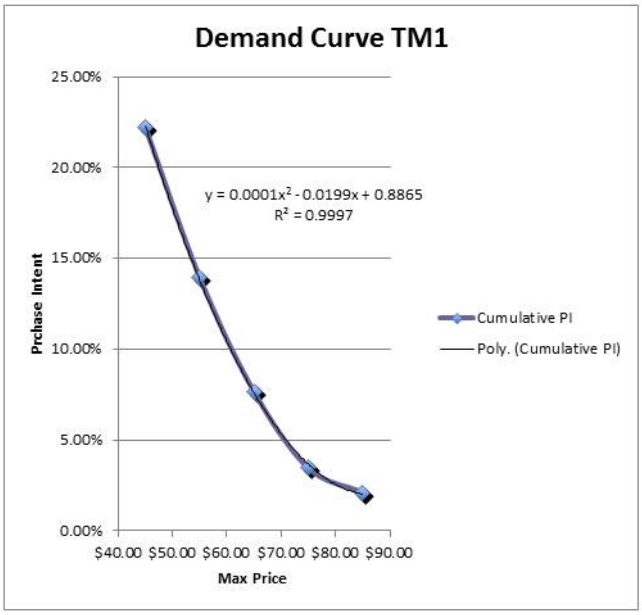
RM Price	Cumulative PI	Total Revenue
$46.66	16.17%	$18,036,180

Adjusted for CSR	Cumulative PI	Revenue
1%	17.17%	$19,151,298

- Price that will yield highest revenue is $46.66
- CSR increased purchase intent by 1%

MK Appendix 14: Demand Curve - Suburban Segment

Primary Target Market: Urban



RM Price	Cumulative PI	Total Revenue
$45.00	19.35%	$155,864,250

Adjusted for CSR*	Cumulative PI	Revenue
1.14%	20.49%	$165,040,832

- Price that will yield highest revenue is $45.00
- CSR increased purchase intent by 1.14%

MK Appendix 16: Purchase Intent

	Primary Segment **Urban Bikers**	Secondary Segment **Suburban Bikers**
Description	Frequent bikers in Urban Environment over the age of 18 with HH income > $50k	Frequent bikers in Urban Environment over the age of 18 with HH income > $50k
Segment Size	17.9 Million	2.39 Million
# Surveys collected	81	56
% Def. Buy (adjusted 80%)	11.85%	11.43%
% Prob. Buy (adjusted 30%)	10.37%	4.82%
CSR % Increase	1.14%	1%

MK Appendix 15: Antelope Island State Park Camp Site

MK Appendix 17: Event Flyer Design

MK Appendix 18: Interbike TotalReach Package Details

interbike 2015 TotalReach Packages

Expand your reach to the cycling marketplace beyond your show booth with a TotalReach marketing package. We've carefully packaged promotional opportunities to help you influence buyers before, during and after the show to best match the most common sales and marketing objectives of exhibitors in a variety of value added packages.

1. TOTAL REACH BOOTH PLUS

Give your brand and products a quick boost and stand out among the 1,200 brands at Interbike. This package combines product photos and description on the Interbike homepage and in the Interbike Event Guide as well as an enhanced exhibitor directory listing online.

- Enhanced Listing Online & Mobile App
- Online Product Showcase
- Show Directory Product Showcase Print Ad
- Logo placement on (1) eNewsletter

COST: $3,024 **DISCOUNT COST: $2,100**

2. TOTAL REACH NEW EXHIBITOR

Take advantage of this marketing package designed especially to help new exhibitors get the attention of retail buyers and the press before, during and after the show.

- Enhanced Listing Online & Mobile App
- Online Product Showcase
- Show Directory Product Showcase Print Ad
- Live @ Interbike
- Co-branded Meterboard Sponsorship

COST: $4,125 **DISCOUNT COST: $3,350**

3. TOTAL REACH LIVE LIMIT-10

Be dynamic and maximize your brand exposure. Stand out with online and print product features, direct communications to retailers prior to the show and directory listing enhancements. Top it off by telling your brand story with a customized Live from Interbike video.

- Enhanced Listing Online & Mobile App
- Online Product Showcase
- Show Directory Product Showcase Print Ad
- Live @ Interbike
- Attendee Email Blast

COST: $5,775 **DISCOUNT COST: $4,900**

4. TOTAL REACH DISPLAY LIMIT-10

Inspire and capture the interest of buyers onsite with a full size display of your bikes and or gear in the upper lobby as they enter and leave the show. Prime them for the show with the included online and print product showcases, and have your logo featured on all marketing materials as an official sponsor leading up to the show.

- Enhanced Listing Online & Mobile App
- Online Product Showcase
- Show Directory Product Showcase Print Ad
- Large Display Case
- 4'x4' Entry Floor Decal

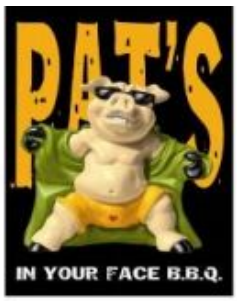
COST: $7,925 **DISCOUNT COST: $5,400**

For complete details contact your Account Executive at 949/226-5745.

Upon receipt of contract you will receive a complete specification sheet for your TotalReach Package.

MK Appendix 19: SecuriSeat Event Flyer

MK Appendix 20: Pat's Barbecue Menu



PAT'S BARBECUE & CATERING
155 W Commonwealth Ave.
Salt Lake City, UT 84115
801-484-5963 (phone)
801-463-6149 (fax)

Let Pat bring the party to you!

For parties of 100 people or more, Pat will bring his smoker on site and serve his world famous barbecue right out of his smoker.

All meals include:

- Smoked Meat(s) of your choice;
- Pat's Baked Beans & one of a kind Coleslaw;
- Pat's BBQ Sauce;
- Fresh baked Cornbread;
- Buns if your meal needs it for sandwiches;
- Assorted Cookies and Brownies;
- Culinary Packs, Plates and Hand Wipes.

Pat provides his own tables to setup the buffet and serve from. He and/or his crew will be on site for 1.5 hours.

1 Meat		2 Meats	3 Meats
Pork Ribs	15.39per person	17.49 per person	19.99 per person
Chicken	11.79 per person		
Brisket	12.79 per person		
Pulled Pork	12.79 per person		

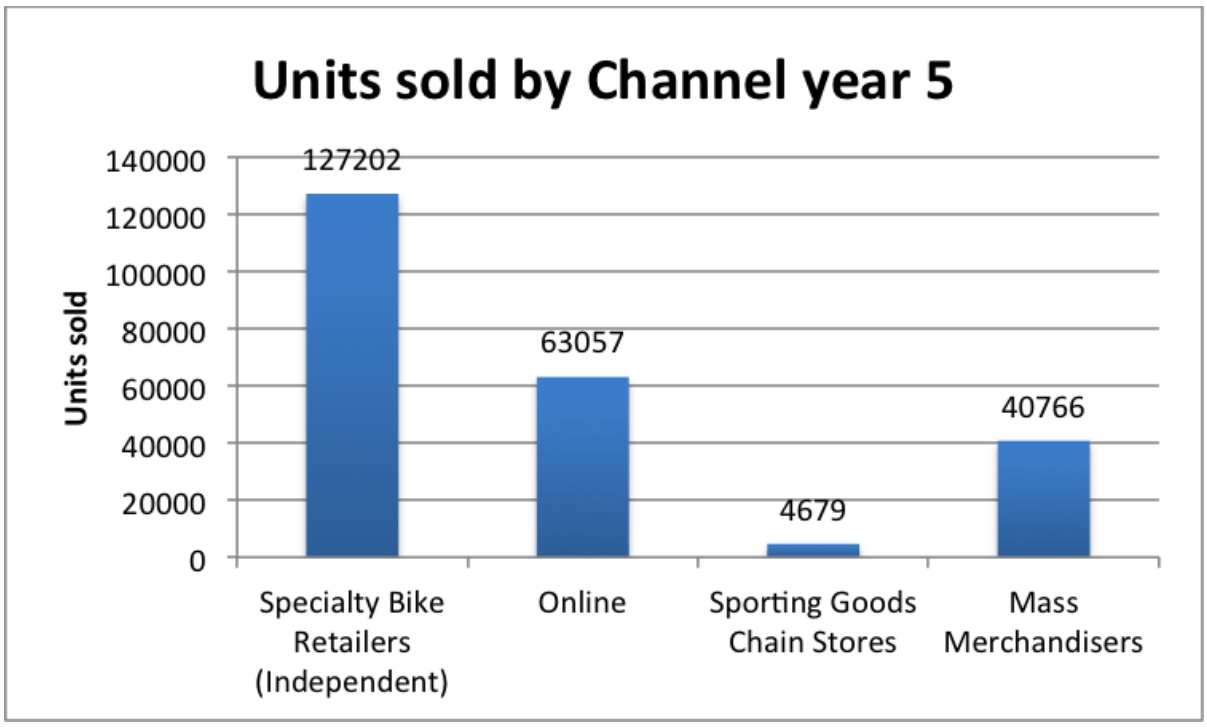
Additional Side Dish's are available for 2.59 per person

Coleslaw; Potato Salad; Baked Beans; Red Beans & Rice; Meaty Gravy & Rice; Mashed Potato's & Gravy; Creole Black Beans & Rice; Cold Black Eyed Pea Salad; Green Salad with choice of Ranch, Italian, Blue Cheese or Caesar Dressing

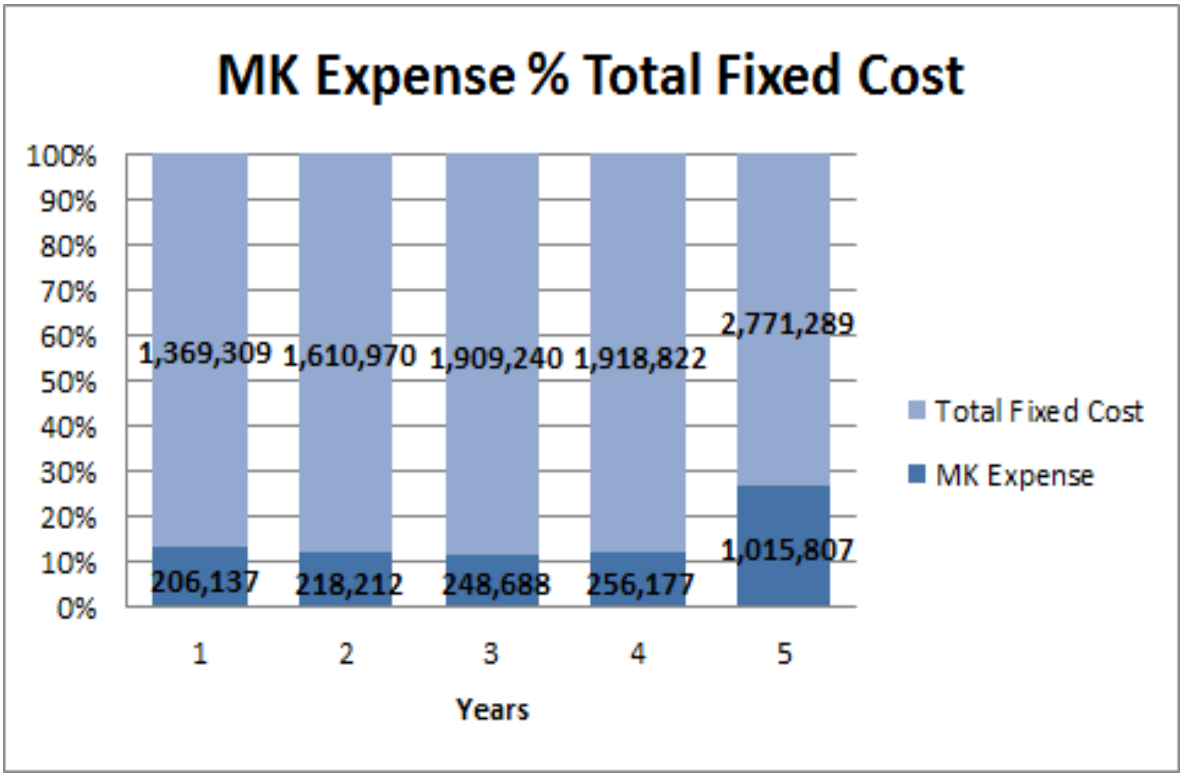
Prices do not include sales tax or gratuity of 18%.

Revised: 11/2012

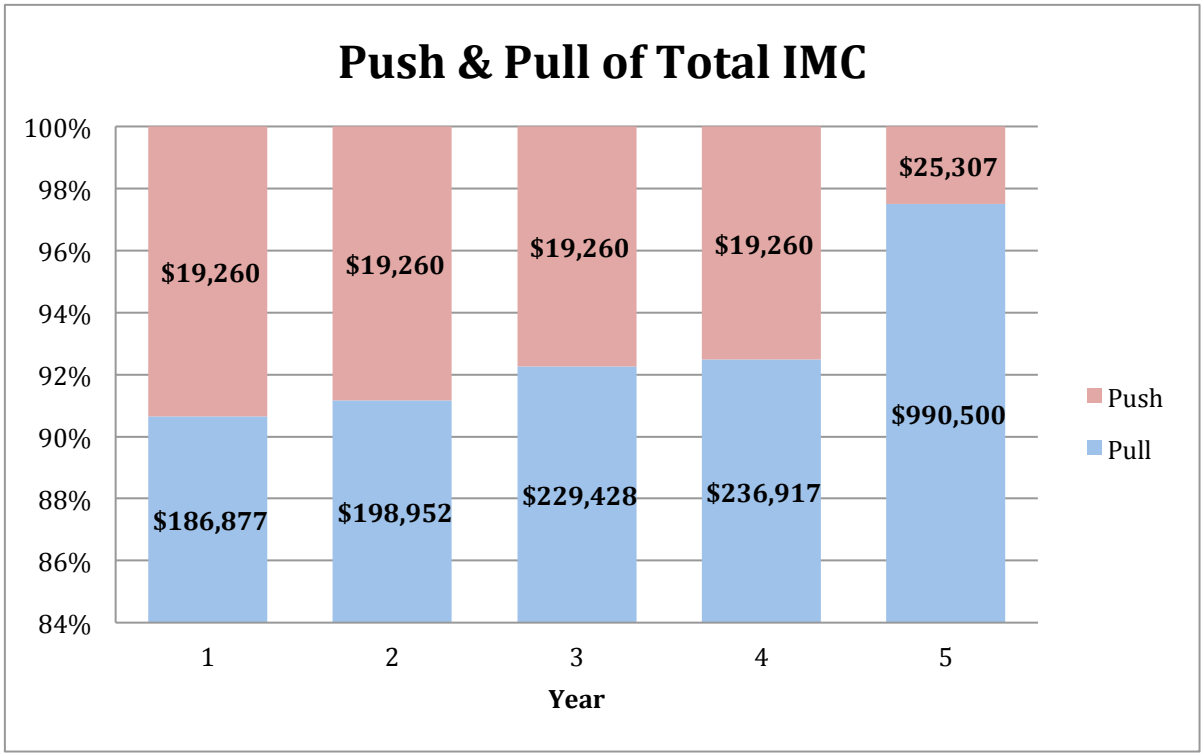
MK Appendix 21: Channel Breakdown Units Sold - Year 5



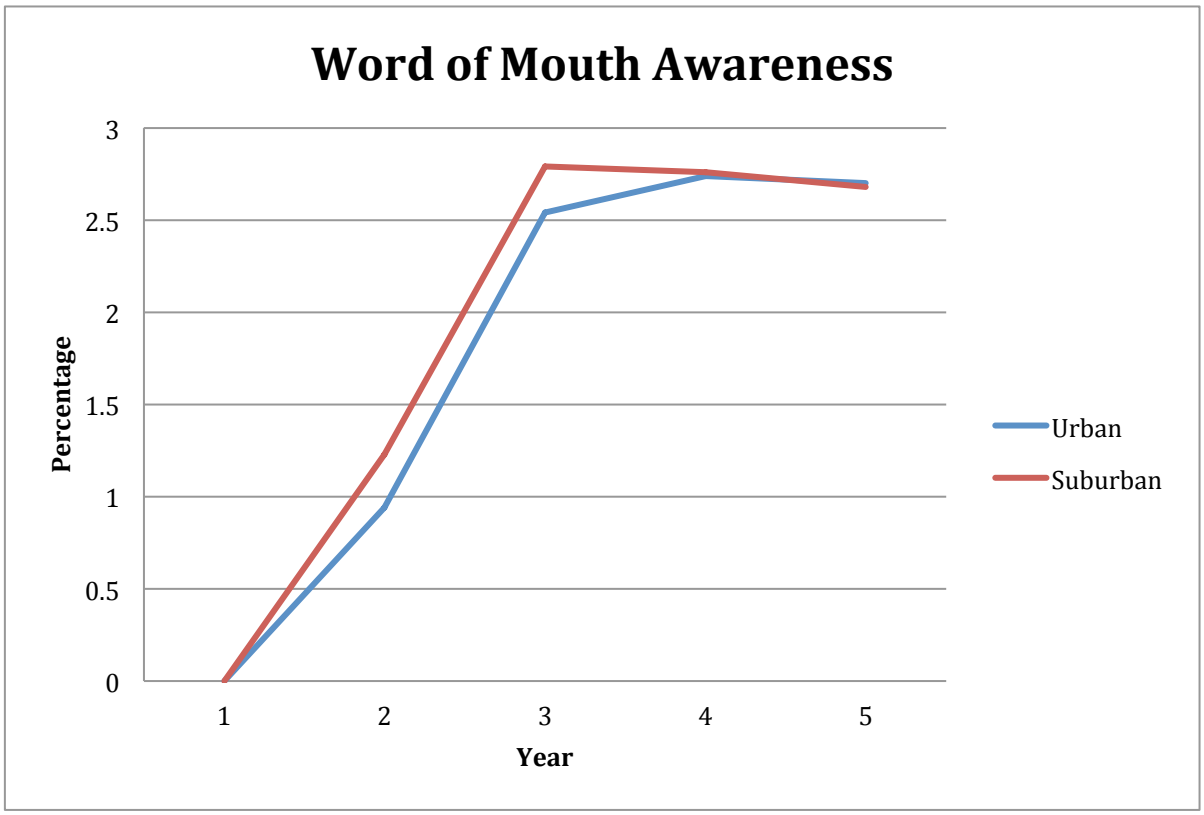
MK Appendix 22: Marketing Expense % of Total Fixed Cost



MK Appendix 23: Cost Push & Pull of Total IMC



MK Appendix 24: Word of Mouth Awareness



MK Appendix 25: Public Relations Details

PR Magazines/Blogs			
Name	**URL**	**Circulation**	**Followers/Visitors**
ESPN Magazine		2,160,552	
Sports Illustrated		3,100,000	
BuzzFeed	http://www.buzzfeed.com/		175,000,000
Bike Snob NYC	http://bikesnobnyc.blogspot.com/		218,593
Red Kite Prayer	http://redkiteprayer.com/		2,752
Bike Hacks	http://www.bikehacks.com/bikehacks/		1,029
Adventure Journal	http://www.adventure-journal.com/		400,000
Lovely Bicycle	http://lovelybike.blogspot.com/		5,500
Copenhagenize	http://www.copenhagenize.com/		23,399
Bike Pretty	http://www.bikepretty.com/blog/		20,440

MK Appendix 26: Event Cost Calculations

Target Market	**Population**	**Size Assumption**	
1	17900000	B	0.06%
2	2390000	A	0.08%

Promotions:	5000 units	1000 units
Pamphlet	$ 657	$ 347
Business Cards	$ 379	$ 110
Fliers	$ 603	
Lanyard	$ 2,690	

Giveaways:	Price	
T-shirt	$ 1,586	
SecuriSeat	$ 135	Cost of raffle for one day

Pull Expos	# days	Rent	Promotions	TotalReach Package	Giveaways	Travel	Lodge	Miscellaneou	**Total**	**Awareness** Urban	Suburban
Bike Expo NY	2	$ 2,625	$ 4,329	$ -	$ 1,856	$ 280	$ 480	$ 370	$ 9,939	**0.60%**	**0.80%**
InterBike	3	$ 2,325	$ 1,639	$ 3,350	$ 1,991	$ 150	$ 777	$ 4,883	$ 15,114	**0.91%**	**1.21%**
Outdoor Retailer Summer Market	4	$ 3,150	$ 1,639	$ 4,320	$ 2,126	$ -	$ -	$ 180	$ 11,414	**0.68%**	**0.91%**
Philly Bike Expo	2	$ 1,225	$ 457	$ -	$ 1,856	$ 375	$ 284	$ 345	$ 4,541	**0.27%**	**0.36%**

	# attendees	Rent	Promotions	Food	Miscellaneou	Total
SecuriSeat Event	80	$ 160	$ 694	$ 2,622	$ 163	$ 3,639

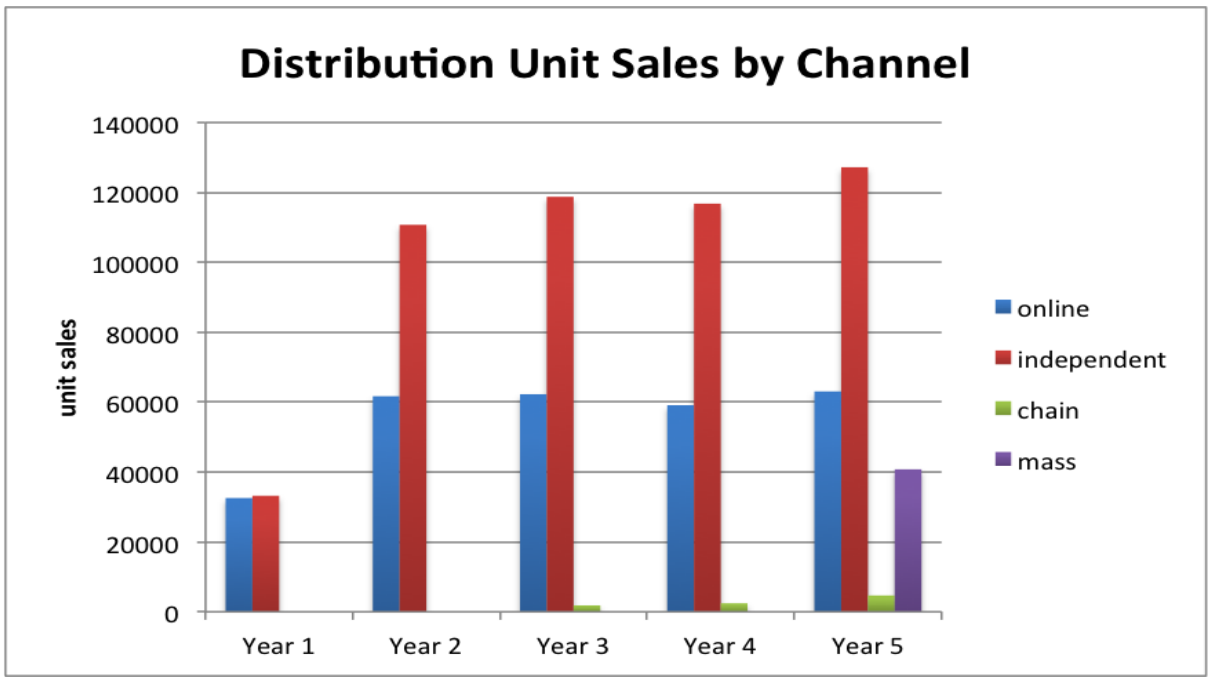
		Awareness
Year	Total Cost	Urban	Suburban
3	$ 3,639	**0.22%**	**0.29%**
4 & 5	$ 7,278	**0.44%**	**0.58%**

PUSH Trade Shows	# days	Registration Fee	Travel	Lodge	**Total**
IBD Summit	2	$ 895	$ 240	$ 360	$ 1,495
GlobalShop	2	$ 750	$ 140	$ 220	$ 1,856

	# days	Rent	Promotions	TotalReach F	Giveaways	Travel	Lodge	**Total**
Health & Fitness Bus	2	$ 1,825	$ 457	$ 1,550	$ 1,856	$ 140	$ 220	$ 6,047

Trade Magazine	Circulation	Cost per ad	#ads	Total Cost
Bicycle Retailer & Industry News	9000	$ 3,595	$ 4	$ 14,380

MK Appendix 27: Distribution of Sales by Channel (Units)



MK Appendix 28: ACV Calculations

	Year 1	Year 2	Year 3	Year 4	Year 5
Online	12%	12%	12%	12%	12%
Mass Merchandisers	0%	0%	0%	0%	8%
Specialty Bike Retailers (Independ	12%	22%	23%	24%	24%
Sporting Goods Chain Stores	0%	0%	0.4%	0.5%	1.1%
Total ACV	24%	34%	35%	36%	45%

Category Channel Market Share	
Online	12%
Mass Merchandisers	29%
Specialty Bike Retailers	51%
Sporting Goods Chain Stores	8%

Channel Breakdowns

Mass Merchandiser	Channel Percentage	Percentage of Total
Walmart	59%	17%
Target	27%	8%
Other	14%	4%
		29%

Sporting Goods Chain Stores	Channel Percentage	Percentage of Total
REI	5%	0%
Academy Sports + Outdoors	10%	1%
Sports Authority	9%	1%
Dicks	15%	1%
Other	61%	5%
		8%

MK Appendix 29: In-House vs. Outsource Sales Force

Year	1	2	3	4	5
Sales units- independent	33,204	93,186	101,026	100,947	125,335
sales units- chain store	-	-	1,563	2,111	5,711
sales units- mass merch	-	-	-	-	41,421
Average Manufacturer selling price	$ 25.84	$ 24.91	$ 24.78	$ 24.72	$ 23.85
OUT OF HOUSE					
Cost for manufacturers reps (10% ofmanuf selling price p	$ 74,709	$ 209,669	$ 227,309	$ 227,130	$ 282,004
IN HOUSE					
Cost for own salesperson ($75,000+commission 2% of sal	$ -	$ -	$ 75,658	$ 75,888	$ 94,178
Marketin Vp cost	$ 105,000	$ 106,575	$ 108,174	$ 109,796	$ 111,443
Total Marketing Salaries Cost	$ 179,709	$ 316,244	$ 411,140	$ 412,815	$ 487,625

MK Appendix 30: Sales Forecast - Base Case

Sales Projections: Base Case

Urban Target Segment

	Year 1 P	Year 2 P	Year 3 P	Year 4 P	Year 5 P
Target Market	17,900,000	17,879,785	17,765,129	17,639,437	17,517,201
Purchase Intent	20.49%	20.49%	20.49%	20.49%	20.49%
ACV	24.24%	33.54%	35.24%	36.20%	45.31%
Awareness	6.30%	12.24%	15.71%	17.20%	19.41%
Trial Rate	0.31%	0.84%	1.13%	1.28%	1.80%
Trial Households	56,015	150,416	201,527	225,021	315,634
Units @ Trial	1	1	1	1	1
Demand	56,015	150,416	201,527	225,021	315,634
Competition Adjustment	-	-	20%	30%	35%
Total Units	56015	150416	161221	157515	205162
Avg Weighted Manufacturer Selling Price to Ch	$25.84	$24.91	$24.78	$24.72	$23.85
Manufacturer Sales	$ 1,447,519	$ 3,747,592	$ 3,995,641	$ 3,893,334	$ 4,894,110

Suburban Target Segment

	Year 1 P	Year 2 P	Year 3 P	Year 4 P	Year 5 P
Target Market	2,390,000	2,385,039	2,367,806	2,350,910	2,334,780
Purchase Intent	17.17%	17.17%	17.17%	17.17%	17.17%
ACV	24.24%	33.54%	35.24%	36.20%	45.31%
Awareness	9.79%	16.02%	18.87%	20.36%	27.89%
Trial Rate	0.41%	0.92%	1.14%	1.27%	2.17%
Trial Households	9,741	22,003	27,039	29,760	50,662
Units @ Trial	1	1	1	1	1
Demand	9,741	22,003	27,039	29,760	50,662
Competition Adjustment	-	-	20%	30%	35%
Total Units	9,741	22,003	21,631	20,832	32,930
Avg Weighted Manufacturer Selling Price to Ch	$25.84	$24.91	$24.78	$24.72	$23.85
Manufacturer Sales	$ 251,734	$ 548,200	$ 536,102	$ 514,904	$ 785,539

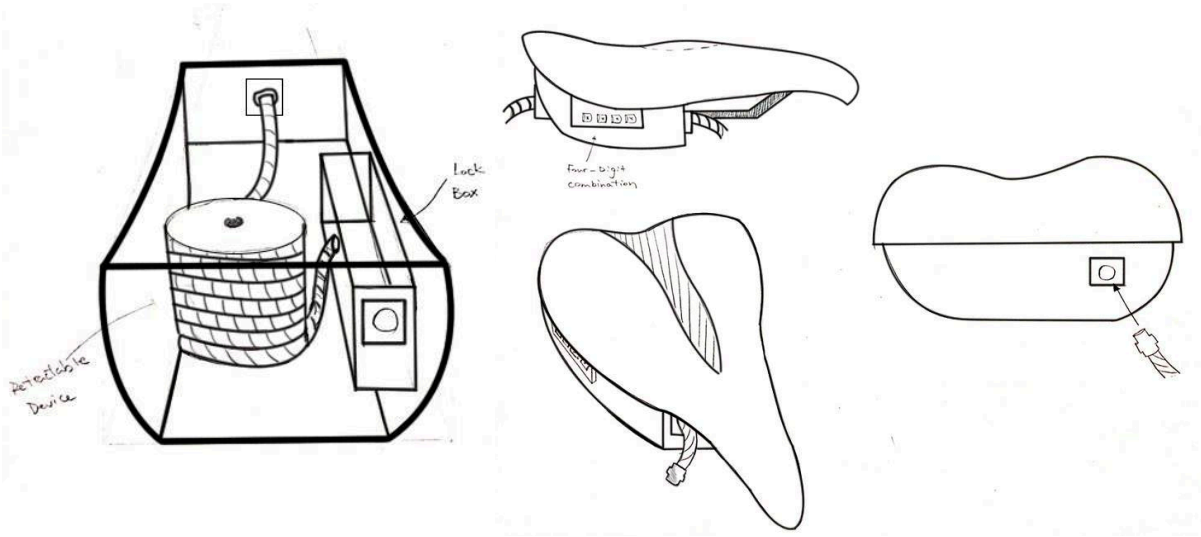
MK Appendix 31: Sales Forecast - Optimistic Case

Optimistic Sales Projections					
Primary Target Market					
	Year 1 P	Year 2 P	Year 3 P	Year 4 P	Year 5 P
Target Market	17900000	17866193	17714541	17537799	17364287
Purchase Intent	20.49%	20.49%	20.49%	20.49%	20.49%
ACV	28.32%	39.77%	41.07%	41.82%	59.24%
Awareness	6.70%	12.87%	16.74%	18.51%	21.56%
Trial Rate	0.39%	1.05%	1.41%	1.59%	2.62%
Trial Households	69607	187384	249613	278116	454363
Units @ Trial	1	1	1	1	1
Demand	69607	187384	249613	278116	454363
Competition Adjustment	-	-	15%	25%	30%
Total Units	69607	187384	212171	208587	318054
Avg Weighted Manufacturer Selling Price to Ch	$25.36	$24.34	$24.43	$24.38	$23.17
Manufacturer Sales	$ 1,765,244	$ 4,560,238	$ 5,183,935	$ 5,085,913	$ 7,370,785
Secondary Target Market					
	Year 1 P	Year 2 P	Year 3 P	Year 4 P	Year 5 P
Target Market	2390000	2381651	2357218	2331830	2307539
Purchase Intent	17.17%	17.17%	17.17%	17.17%	17.17%
ACV	28.32%	39.77%	41.07%	41.82%	59.24%
Awareness	11.30%	17.95%	21.30%	23.06%	33.43%
Trial Rate	0.55%	1.23%	1.50%	1.66%	3.40%
Trial Households	13129	29196	35415	38607	78470
Units @ Trial	1	1	1	1	1
Demand	13129	29196	35415	38607	78470
Competition Adjustment	-	-	15%	25%	30%
Total Units	13129	29196	30103	28955	54929
Avg Weighted Manufacturer Selling Price to Ch	$25.36	$24.34	$24.43	$24.38	$23.17
Manufacturer Sales	$ 332,963	$ 710,516	$ 735,488	$ 706,002	$ 1,272,956
Total Sales	**$ 2,098,208**	**$ 5,270,754**	**$ 5,919,423**	**$ 5,791,914**	**$ 8,643,741**

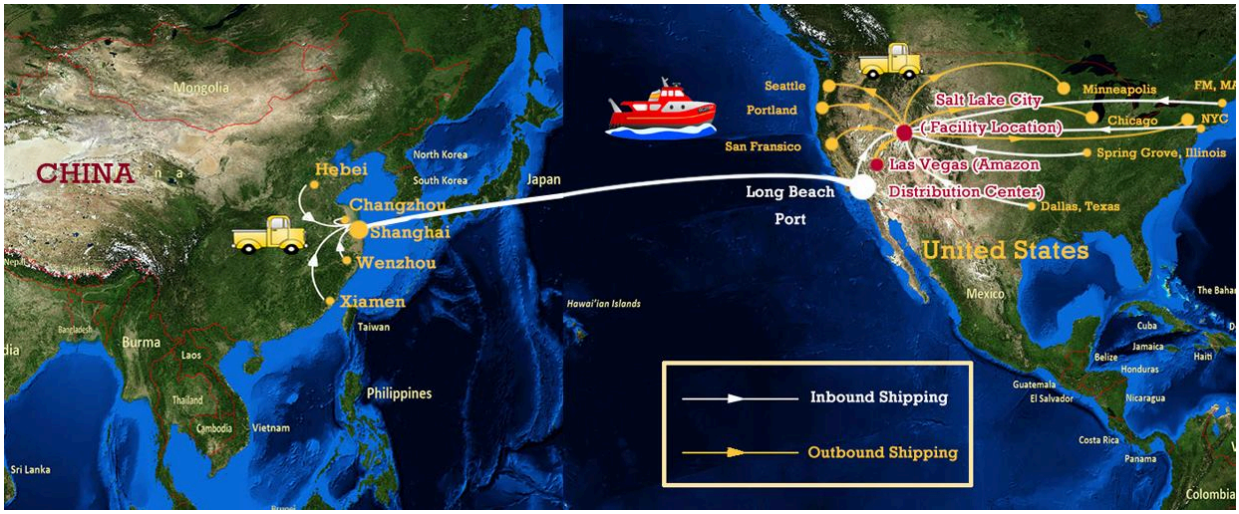
MK Appendix 32: Sales Forecast - Pessimistic Case

Pessimistic Sales Projections					
Primary Target Market					
	Year 1 P	Year 2 P	Year 3 P	Year 4 P	Year 5 P
Target Market	17900000	17895437	17823576	17750942	17680409
Purchase Intent	20.49%	20.49%	20.49%	20.49%	20.49%
ACV	18.16%	25.01%	26.82%	27.98%	36.46%
Awareness	6.06%	11.74%	14.74%	16.03%	17.76%
Trial Rate	0.23%	0.60%	0.81%	0.92%	1.33%
Trial Households	40363	107651	144375	163130	234647
Units @ Trial	1	1	1	1	1
Demand	40363	107651	144375	163130	234647
Competition Adjustment	-	-	25%	35%	40%
Total Units	40363	107651	108282	106035	140788
Avg Weighted Manufacturer Selling Price to Ch	$26.22	$25.20	$25.01	$24.90	$23.86
Manufacturer Sales	$ 1,058,200	$ 2,712,647	$ 2,707,661	$ 2,640,029	$ 3,359,383
Secondary Target Market					
	Year 1 P	Year 2 P	Year 3 P	Year 4 P	Year 5 P
Target Market	2390000	2388155	2377830	2368554	2359659
Purchase Intent	17.17%	17.17%	17.17%	17.17%	17.17%
ACV	18.16%	25.01%	26.82%	27.98%	36.46%
Awareness	8.89%	14.72%	17.09%	18.43%	24.28%
Trial Rate	0.28%	0.63%	0.79%	0.89%	1.52%
Trial Households	6625	15101	18709	20972	35862
Units @ Trial	1	1	1	1	1
Demand	6625	15101	18709	20972	35862
Competition Adjustment	-	-	25%	35%	40%
Total Units	6625	15101	14032	13632	21517
Avg Weighted Manufacturer Selling Price to Ch	$26.22	$25.20	$25.01	$24.90	$23.86
Manufacturer Sales	$ 173,697	$ 380,528	$ 350,870	$ 339,406	$ 513,423
Total Sales	**$ 1,231,898**	**$ 3,093,176**	**$ 3,058,531**	**$ 2,979,435**	**$ 3,872,805**

OM Appendix 1: SecuriSeat Design

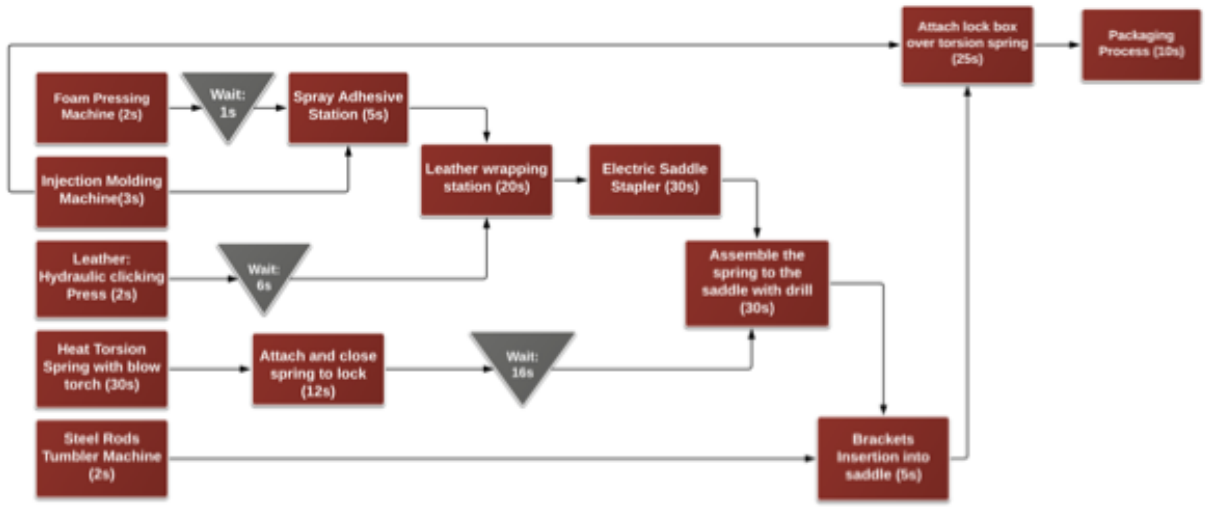


OM Appendix 2: Shipping Passage



OM Appendix 3: Map Colorado

OM Appendix 4: Process Flow Diagram



OM Appendix 5: Optimization - Year 1

Period			1	2	3	4	5	6	7	8	9	10	11	12	Total
Forecast			2,630	1,973	4,603	8,548	7,891	5,261	5,261	5,918	7,233	3,945	4,603	7,891	65,757
Full Time Employees		1	1	2	2	2	2	2	2	2	2	2	2	3	2.00
Regular Production			2,630	5,499	5,884	5,884	5,884	5,884	5,884	5,884	5,884	4,707	4,707	8,749	67,481
Overtime Production			-	-	-	-	-	-	-	-	-	-	-	-	-
Part Time Production			-	-	-	-	-	-	-	-	-	-	-	-	-
Ending Inventory		4,015	4,015	7,541	8,822	6,158	4,151	4,775	5,398	5,364	4,015	4,777	4,881	5,739	5,470
Costs (per unit):															
Regular	@	$ 8.95	$ 23,528	$ 49,192	$ 52,635	$ 52,635	$ 52,635	$ 52,635	$ 52,635	$ 52,635	$ 52,635	$ 42,108	$ 42,108	$ 78,263	$ 603,641
Overtime	@	$ 13.42	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Part Time	@	$ 17.89	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Inventory	@	$ 0.22	$ 898	$ 1,292	$ 1,830	$ 1,675	$ 1,153	$ 998	$ 1,138	$ 1,203	$ 1,049	$ 983	$ 1,080	$ 1,188	$ 14,486
Total			$ 24,426	$ 50,484	$ 54,464	$ 54,310	$ 53,787	$ 53,633	$ 53,772	$ 53,838	$ 53,683	$ 43,091	$ 43,188	$ 79,450	$ 618,127

OM Appendix 6: Optimization - Year 2

Period			1	2	3	4	5	6	7	8	9	10	11	12	Total
Forecast			6,897	5,173	12,069	22,414	20,690	13,794	13,794	15,518	18,966	10,345	12,069	20,690	172,419
Full Time Employees		5	5	5	5	6	6	6	6	6	6	6	6	6	5.75
Regular Production			13,797	11,769	13,271	17,653	17,653	14,123	14,123	16,172	17,653	14,123	14,123	15,003	179,463
Overtime Production			-	-	-	-	-	-	-	-	-	-	-	-	-
Part Time Production			-	-	-	-	-	-	-	-	-	-	-	-	-
Ending Inventory		5,739	12,639	19,236	20,437	15,676	12,639	12,968	13,298	13,952	12,639	16,417	18,470	12,783	15,096
Costs (per unit):															
Regular	@	$ 6.83	$ 94,225	$ 80,375	$ 90,633	$ 120,563	$ 120,563	$ 96,450	$ 96,450	$ 110,446	$ 120,563	$ 96,450	$ 96,450	$ 102,464	$ 1,225,633
Overtime	@	$ 10.24	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Part Time	@	$ 13.66	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Inventory	@	$ 0.17		$ 2,721	$ 3,387	$ 3,083	$ 2,417	$ 2,186	$ 2,242	$ 2,326	$ 2,270	$ 2,480	$ 2,978	$ 2,668	$ 28,759
Total			$ 94,225	$ 83,096	$ 94,020	$ 123,646	$ 122,980	$ 98,636	$ 98,693	$ 112,772	$ 122,833	$ 98,931	$ 99,429	$ 105,132	$ 1,255,962

OM Appendix 7: Optimization - Year 3

Period		1	2	3	4	5	6	7	8	9	10	11	12	Total
Forecast		7,314	5,486	12,800	23,771	21,942	14,628	14,628	16,457	20,114	10,971	12,800	21,942	182,853
Full Time Employees	6	6	6	6	6	6	6	6	6	6	6	6	7	6.08
Regular Production		14,122	14,122	14,122	14,122	14,650	14,628	15,895	17,652	17,652	14,122	14,122	19,253	184,460
Overtime Production		-	-	-	-	-	-	-	-	-	-	-	-	-
Part Time Production		-	-	-	-	-	-	-	-	-	-	-	-	-
Ending Inventory	12,783	19,590	28,227	29,548	19,899	12,607	12,607	13,873	15,068	12,607	15,757	17,079	14,390	17,604
Costs (per unit):														
Regular @	$ 6.84	$ 96,554	$ 96,554	$ 96,554	$ 96,554	$ 100,165	$ 100,018	$ 108,678	$ 120,692	$ 120,692	$ 96,554	$ 96,554	$ 131,642	$ 1,261,210
Overtime @	$ 10.80	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Part Time @	$ 13.67	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Inventory @	$ 0.17	$ 2,767	$ 4,087	$ 4,938	$ 4,226	$ 2,778	$ 2,155	$ 2,263	$ 2,474	$ 2,365	$ 2,424	$ 2,806	$ 2,690	$ 35,973
Total		$ 99,321	$ 100,641	$ 101,492	$ 100,780	$ 102,943	$ 102,173	$ 110,941	$ 123,166	$ 123,058	$ 98,978	$ 99,360	$ 134,331	$ 1,297,183

OM Appendix 8: Optimization - Year 4

Period		1	2	3	4	5	6	7	8	9	10	11	12	Total
Forecast		7,134	5,350	12,484	23,185	21,402	14,268	14,268	16,051	19,618	10,701	12,484	21,402	178,347
Full Time Employees	7	7	7	7	7	7	7	7	7	7	7	7	7	7.00
Regular Production		16,475	16,475	16,475	16,475	16,475	16,475	16,475	16,475	16,475	16,475	16,475	16,475	197,702
Overtime Production		-	-	-	-	-	-	-	-	-	-	-	-	-
Part Time Production		-	-	-	-	-	-	-	-	-	-	-	-	-
Ending Inventory	14,390	23,731	34,856	38,847	32,137	27,211	29,418	31,626	32,050	28,907	34,681	38,672	33,746	32,157
Costs (per unit):														
Regular @	$ 7.05	$ 116,222	$ 116,222	$ 116,222	$ 116,222	$ 116,222	$ 116,222	$ 116,222	$ 116,222	$ 116,222	$ 116,222	$ 116,222	$ 116,222	$ 1,394,666
Overtime @	$ 11.15	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Part Time @	$ 14.11	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Inventory @	$ 0.18		$ 5,166	$ 6,499	$ 6,259	$ 5,233	$ 4,994	$ 5,383	$ 5,615	$ 5,375	$ 5,607	$ 6,468	$ 6,386	$ 62,986
Total		$ 116,222	$ 121,388	$ 122,721	$ 122,482	$ 121,455	$ 121,216	$ 121,605	$ 121,837	$ 121,597	$ 121,829	$ 122,690	$ 122,608	$ 1,461,014

OM Appendix 9: Optimization - Year 5

Period		1	2	3	4	5	6	7	8	9	10	11	12	Total
Forecast		9,524	7,143	16,666	30,952	28,571	19,047	19,047	21,428	26,190	14,286	16,666	28,571	238,092
Full Time Employees	8	8	8	8	8	8	8	8	8	8	8	8	8	8.00
Regular Production		18,829	18,829	18,829	18,829	18,829	18,829	18,829	18,829	18,829	18,829	18,829	18,829	225,946
Overtime Production		-	-	-	-	-	-	-	-	-	-	-	-	-
Part Time Production		-	-	-	-	-	-	-	-	-	-	-	-	-
Ending Inventory	33,746	43,147	54,904	57,234	45,421	35,965	35,938	35,910	33,526	26,427	31,114	33,443	23,988	38,085
Costs (per unit):														
Regular @	$ 6.46	$ 121,724	$ 121,724	$ 121,724	$ 121,724	$ 121,724	$ 121,724	$ 121,724	$ 121,724	$ 121,724	$ 121,724	$ 121,724	$ 121,724	$ 1,460,688
Overtime @	$ 9.70	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Part Time @	$ 12.93	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Inventory @	$ 0.16	$ 6,214	$ 7,923	$ 9,062	$ 8,296	$ 6,577	$ 5,811	$ 5,806	$ 5,611	$ 4,845	$ 4,650	$ 5,217	$ 4,641	$ 74,652
Total		$ 127,938	$ 129,647	$ 130,786	$ 130,020	$ 128,301	$ 127,535	$ 127,530	$ 127,335	$ 126,569	$ 126,374	$ 126,941	$ 126,365	$ 1,535,340

OM Appendix 10: Make vs Buy - Year 1

Year 1				
Make			Buy	
Price of Machine	8,000.00		Cost of single tortion spring	0.10
Opportunity Cost (of space)	1,300.73		Cost of Tortion Spring for the ;	6,575.70
Utilities	1,650.00		Shipping Cost	8,700.00
Direct Labor	49,975.32		Total Cost to buy	15,275.70
Electricity	4,928.00			
Shipping Cost	20,000.00		Shipping Costs	
Insurance	4,050.00		Demand	65,757.00
Cost of Tortion material per product	0.04		EOQ	2,332.00
Demand	65,757.00		# Orders Per Year	29.00
Total Cost of Torsion Device	2,630.28		Shipping Cost/Order	300.00
Total Cost to MAKE	92,534.33		Total Shipping Cost	8,700.00
Utilities	Price	Q	Total Price	
Trips	1500	1	1500	
Service	150	1	150	
Total			1650	

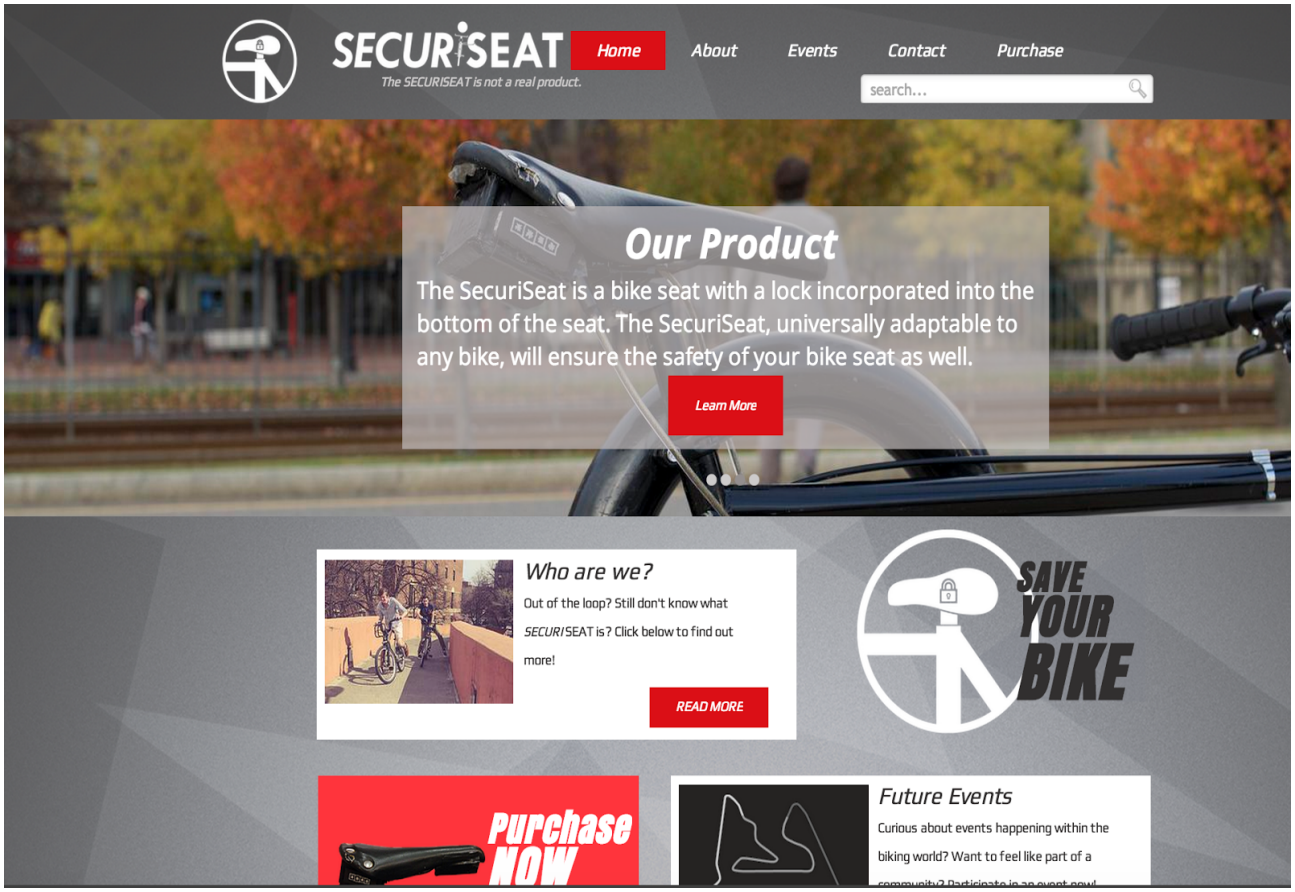
OM Appendix 11: Make vs Buy - Year 5

Year 5				
Make			Buy	
Price of Machine	8,000.00		Cost of single tortion spring	0.10
Opportunity Cost (of space)	2,601.46		Cost of Tortion Spring for the yea	26,380.80
Utilities	1,800.00		Shipping Cost	17,100.00
Direct Labor	229,512.96		Total Cost to buy	43,480.80
Electricity	9,856.00			
Shipping Cost	20,000.00		Shipping Costs	
Insurance	4,050.00		Demand	263,808.00
Cost of Tortion material per product	0.04		EOQ	4,659.00
Demand	263,808.00		# Orders Per Year	57.00
Total Cost of Torsion Device	10,552.32		Shipping Cost/Order	300.00
Total Cost to MAKE	286,372.74		Total Shipping Cost	17,100.00
Utilities	Price	Q	Total Price	
Trips	1500	1	1500	
Service	150	2	300	
Total			1800	

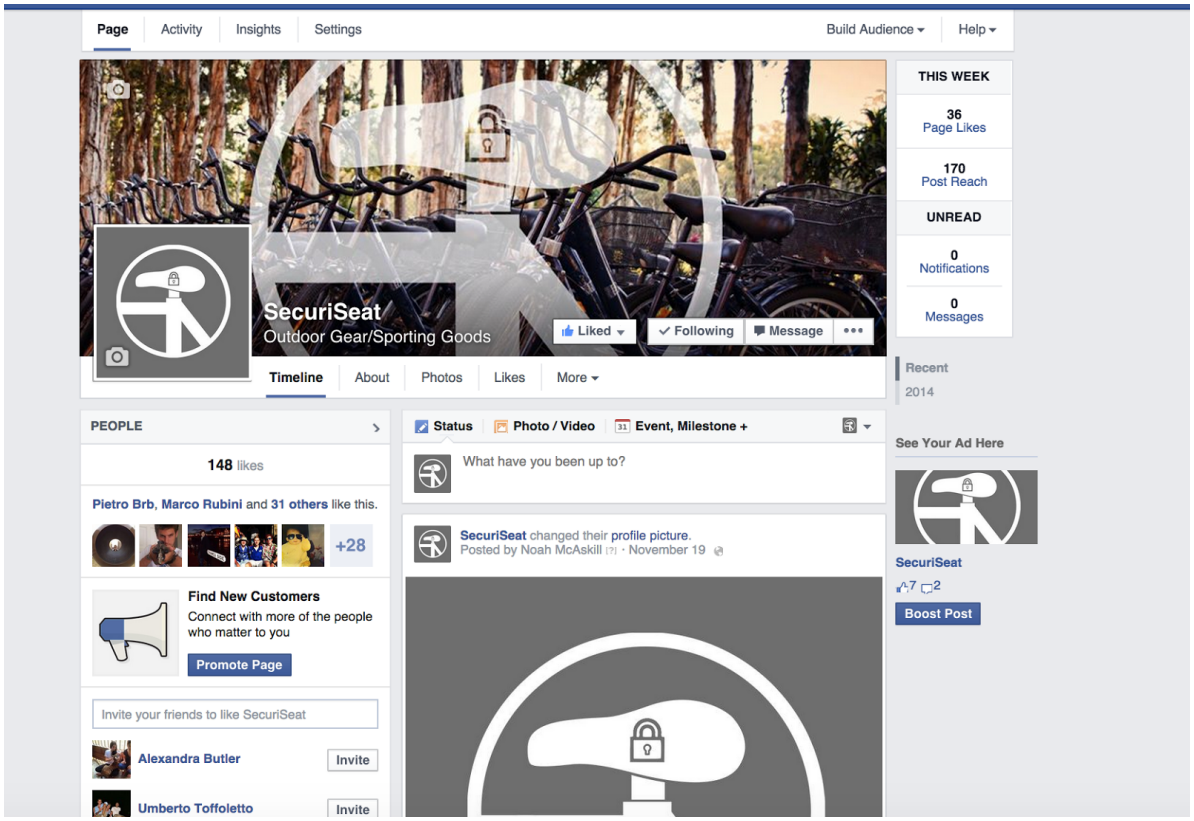
OM Appendix 12: Shipping Costs

Shipping	International shipping	Domestic shipping
Cost	Light item: 62 USD/ton Heavy Item: 72 USD/ Ton	40 feet container: USD 1,347

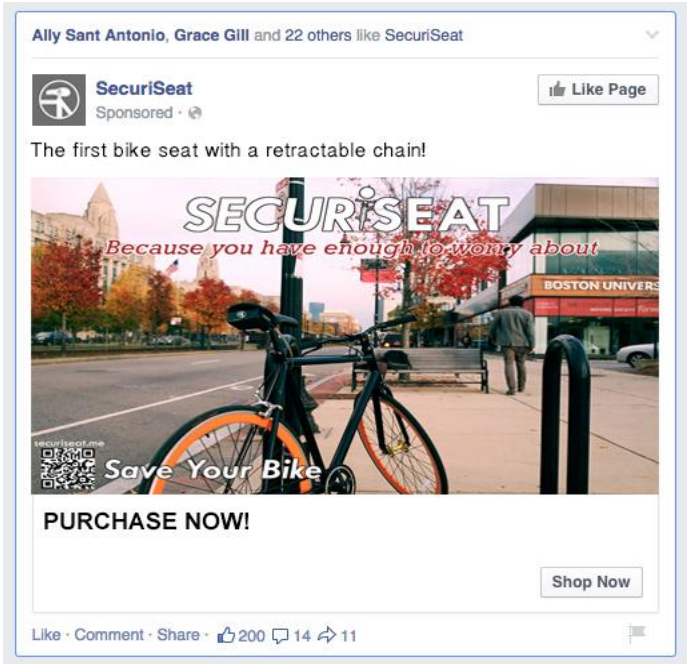
IS Appendix 1: Website



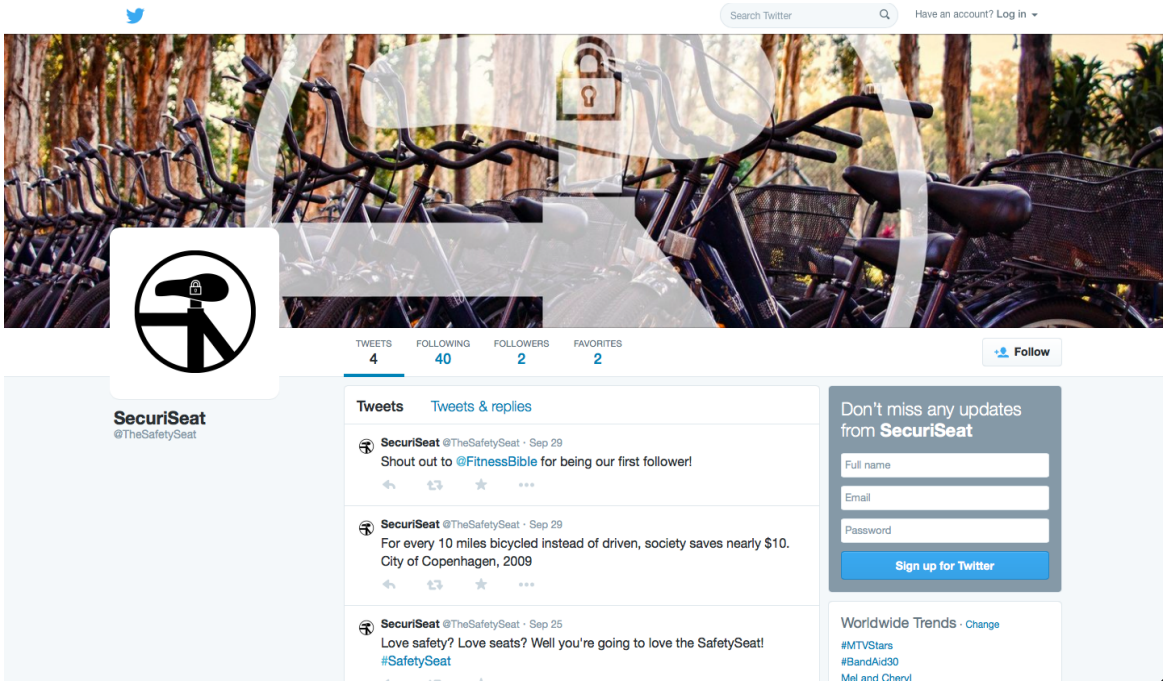
IS Appendix 2: Facebook



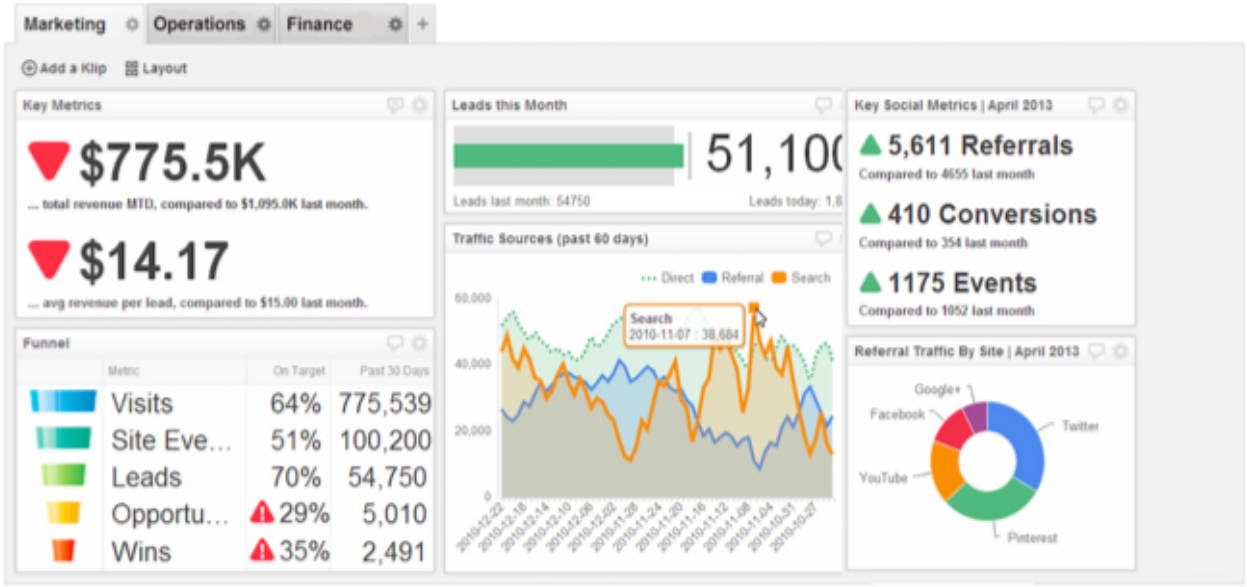
IS Appendix 3: Facebook Ad



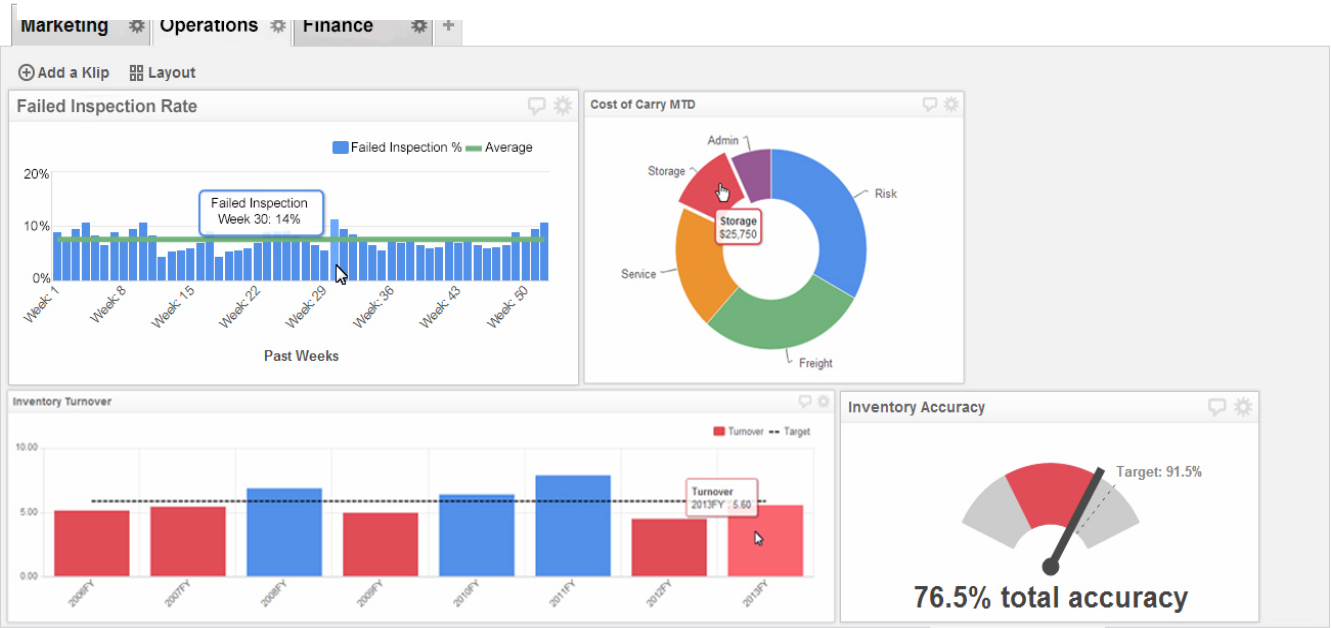
IS Appendix 4: Twitter



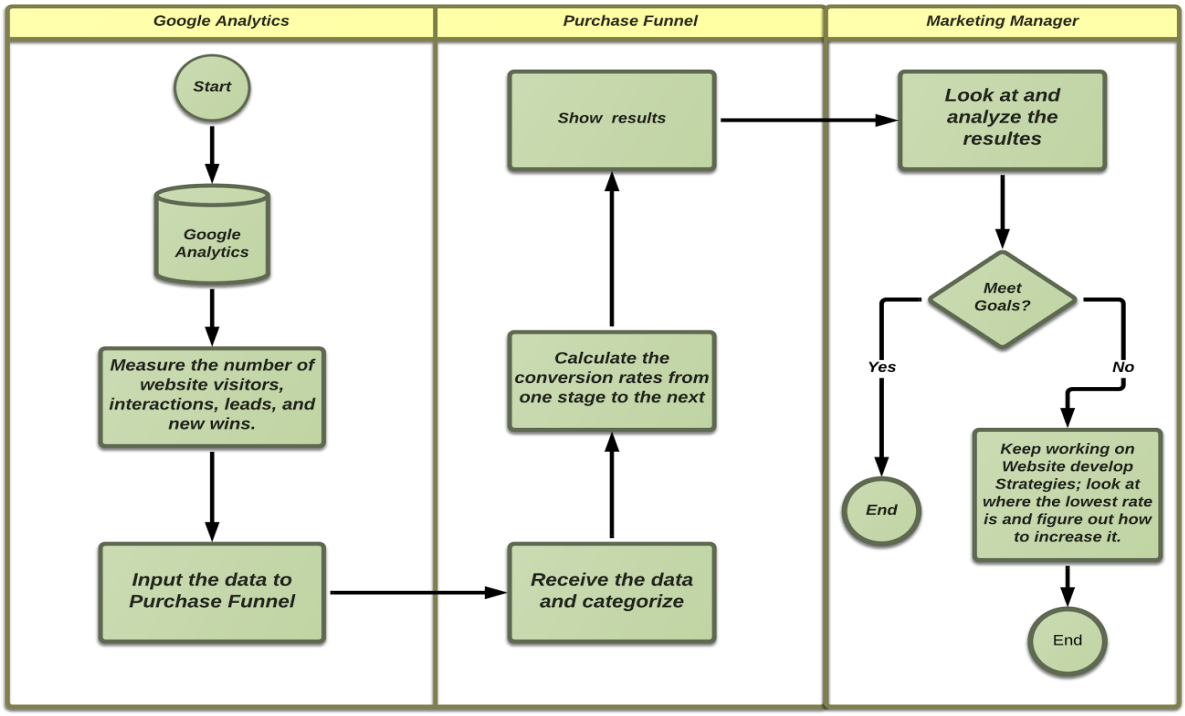
IS Appendix 5: Sample Report - Purchase Funnel



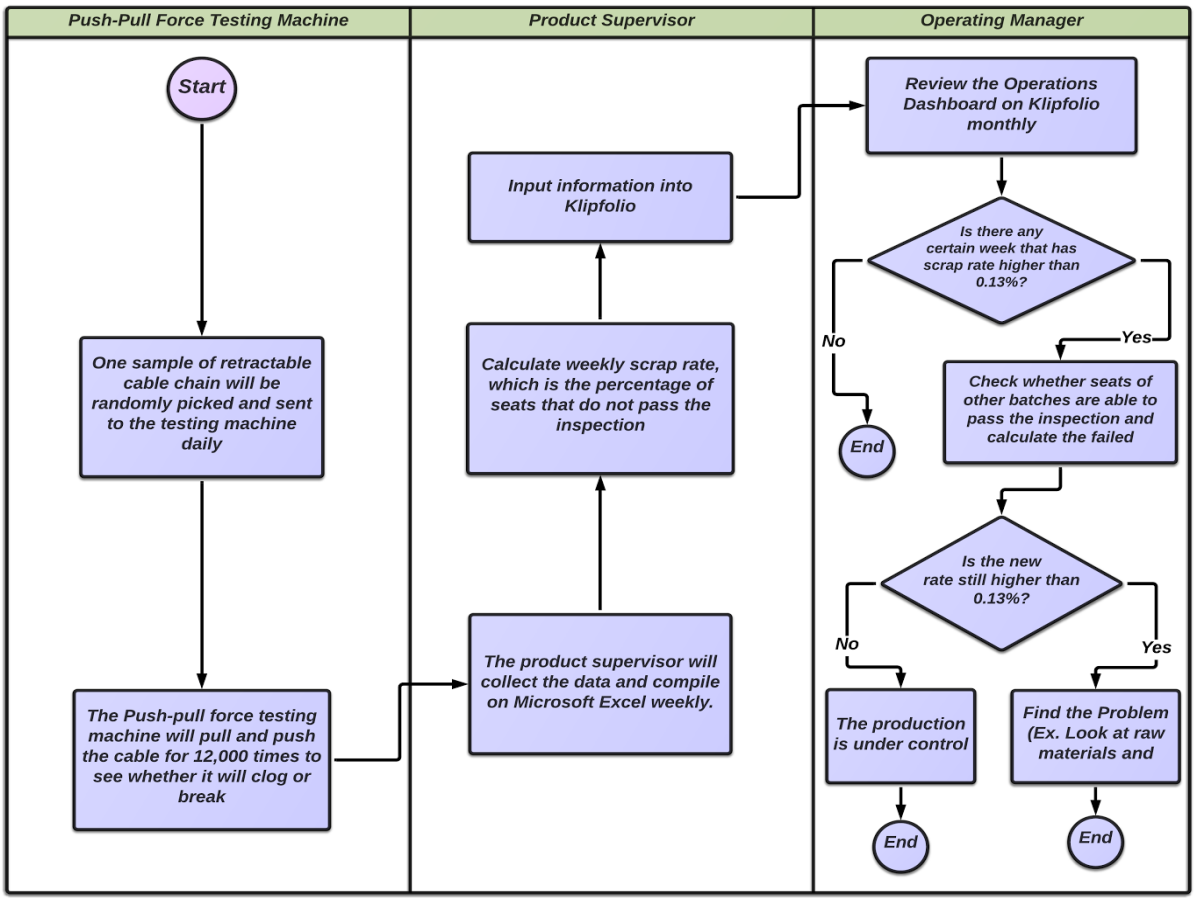
IS Appendix 6: Sample Report - Inventory Turnover



IS Appendix 7: BMNP Diagram - Purchase Funnel



IS Appendix 8: BMNP Diagram - Failed Inspection Rate



IS Appendix 9: ERP Decision Matrix

Criteria	Weighting	ERP Vendors Evaluation Scores		Score Based on Weighting	
		Abas USA	Xledger	Abas USA	Xledger
Information Quality	0.16	4	5	0.64	0.8
Functionality	0.15	5	4	0.75	0.6

Price	**0.12**	**3**	**4**	**0.36**	**0.48**
Implementation Speed	**0.1**	**3**	**5**	**0.3**	**0.5**
Security	**0.1**	**5**	**4**	**0.5**	**0.4**
Ease of Use	**0.09**	**2**	**5**	**0.18**	**0.45**
System Stability	**0.09**	**5**	**5**	**0.45**	**0.45**
Compatibility with other systems	**0.08**	**4**	**3**	**0.32**	**0.24**
Ease of customization	**0.06**	**5**	**5**	**0.3**	**0.3**
Service & Support	**0.05**	**2**	**4**	**0.1**	**0.2**
Sum	**1**			**3.9**	**4.42**

FE Appendix 1: Initial Investment

Initial Investment in Fixed Assets	
Machinery Expense	78,258
IT Hardware	51,724
Office Assets	5,800
Total	135,781
Initial Working Capital	
Cash (Additional cash required above Start up costs. For inventory see below)	175,654
Initial Operating Expenses (Tax Deductible)	
Product Development (Prototype, engineer, etc.)	90,000
Pre-Marketing Expenses (Marketing expenses before year 1)	30,920
All Other (Miscellaneous non depreciated expenses, additional salaries, Rent etc)	383,769
Total	504,690
Total Startup Cost	816,125

FE Appendix 2: Balance Sheet

	Time 0	Year 1	Year 2	Year 3	Year 4	Year 5
Current Assets						
Minimum Cash Balance	175,654	169,925	429,579	453,174	440,824	567,965
Accounts Receivable	-	424,813	988,032	1,042,301	925,730	1,192,726
Raw Materials and WIP (1)	18,675	76,886	197,315	202,576	185,963	265,595
Finished Goods Inventory (1)	103,754	81,210	142,557	189,293	197,080	355,528
Current Assets	298,083	752,835	1,757,484	1,887,344	1,749,596	2,381,814
Fixed Assets						
Gross Fixed Assets	135,781	135,781	137,626	137,626	137,626	137,626
Depreciation	-	27,156	54,681	82,207	109,732	137,257
Net Fixed Assets	135,781	108,625	82,945	55,419	27,894	369
TOTAL ASSETS	433,864	861,460	1,840,428	1,942,764	1,777,490	2,382,183
Current Liabilities						
Accounts Payable	-	49,299	122,575	127,380	154,436	191,783
Current Liabilities	-	49,299	122,575	127,380	154,436	191,783
Equity						
Paid in Capital (Cumulative Plug)	938,554	1,379,722	1,379,722	1,379,722	1,379,722	1,379,722
Retained Earnings before dividends	(504,690)	(567,561)	444,052	1,391,775	2,254,071	3,183,570
Dividends (Cumulative)	-	-	105,921	956,113	2,010,738	2,372,892

FE Appendix 3: Income Statement

	Time 0	Year 1	Year 2	Year 3	Year 4	Year 5
TOTAL REVENUES		1,699,253	4,295,792	4,531,743	4,408,238	5,679,649
Variable Costs		365,659	971,274	1,015,440	1,024,731	1,331,669
Fixed Production Costs		250,577	254,477	258,360	262,233	266,522
TOTAL COST OF GOODS SOLD		616,236	1,225,751	1,273,800	1,286,964	1,598,191
GROSS PROFIT		1,083,017	3,070,041	3,257,943	3,121,274	4,081,459
Start Up Expenses	504,690					
Fixed Administrative Costs ($)		807,231	845,864	1,009,648	1,005,681	1,046,017
Marketing Expenses ($) Excluding Sales Force		206,137	218,212	248,688	256,177	1,015,807
Sales Force Expense (excluding Manufacturing Reps Commission)		-	-	75,773	76,028	94,464
Maufacturer's Sales Reps Commission Expense (10%)		74,709	249,154	267,203	262,781	286,204
IS Expenses		30,656	43,264	49,568	55,922	62,276
New Depreciation		-	369	369	369	369
Depreciation		27,156	27,156	27,156	27,156	27,156
Earnings Before Tax		(62,871)	1,686,022	1,579,538	1,437,160	1,549,166
Taxes		-	674,409	631,815	574,864	619,666
NET INCOME	(504,690)	(62,871)	1,011,613	947,723	862,296	929,500

FE Appendix 4: Cash Flow Statement

	Time 0	Year 1	Year 2	Year 3	Year 4	Year 5
Initial Investment in Fixed	(135,781)					
Net Income	(504,690)	(62,871)	1,011,613	947,723	862,296	929,500
+Depreciation	-	27,156	27,525	27,525	27,525	27,525
-Change in Net Working Ca	(298,083)	(405,453)	(931,373)	(125,056)	164,804	(594,871)
-Change in Fixed Assets	-	-	(1,845)	-	-	-
Net Cash Flow	(802,773)	(441,168)	105,921	850,192	1,054,625	362,154
Terminal Value of Business						2,190,400
Total Cash Flow	(938,554)	(441,168)	105,921	850,192	1,054,625	2,552,554

FE Appendix 5: Scenario Calculations

	Year 1	Year 2	Year 3	Year 4	Year 5
Base Case					
Sales Revenue $	$1,699,253	$4,295,792	$4,531,743	$4,408,238	$5,679,649
Marketing Expenses	$206,137	$218,212	$248,688	$256,177	$1,015,807
% Sales	12%	5%	5%	6%	18%
COGS % Sales	36%	29%	28%	29%	28%
Inventory $	$158,096	$339,872	$391,869	$383,042	$621,123
Days Inventory	94	101	112	109	142
Units Produced	65,757	172,419	182,853	178,347	238,092
Year 5 Paid In Capital					$1,379,722
Optimistic Case					
Sales Revenue $	$2,098,208	$5,270,754	$5,919,423	$5,791,914	$8,643,741
Marketing Expenses	$206,137	$218,212	$248,688	$256,177	$1,015,807
% Sales	10%	4%	4%	4%	12%
COGS % Sales	33%	26%	26%	27%	25%
Inventory $	$148,297	$325,558	$372,880	$361,589	$570,263
Days Inventory	79	85	89	86	96
Units Produced	82,736	214,652	242,274	237,542	372,983
Year 5 Paid In Capital					$1,289,975
Pessimistic Case					
Sales Revenue $	$1,231,898	$3,093,176	Liquidate		
Marketing Expenses	$206,137	$218,212	Liquidate		
% Sales	17%	7%	Liquidate		
COGS % Sales	44%	33%	Liquidate		
Inventory $	$177,051	$367,938	Liquidate		
Days Inventory	121	131	Liquidate		
Units Produced	46,989	122,753	Liquidate		
Paid In Capital			$4,411,065		

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COPY OF FINAL SURVEY

New Product Survey

We are a team of Boston University Students working on a new product project. Please read all questions carefully and answer honestly. All responses will be kept confidential.

Product Category Questions

1. *Do you currently own a bicycle?*
   (Yes) (No)

2. *If yes, was it a pre-owned bicycle?*
   (Yes) (No)

3. *Roughly how much did you spend on your bicycle? (please circle one)*
   ($50-$124.99) ($125-$199.99) ($200-$274.99) ($275-349.99) (Over $350)

4. *How many days per year do you ride your bicycle? (please circle one)*
   Seldom (1-24 days) Infrequent (25-49 days) Occasionally (50-110 days) Frequent (more than 110 days)

5. *For what purpose do you **primarily** use your bicycle? (please circle one)*
   (Recreation/Leisure) (Transportation/Commuting)
   (Fitness/Racing) (Other- please specify):_____

6. *Do you currently own a bike lock? (please circle one)*
   (Yes) (No)

7. *If you answered yes to the previous question, what kind of lock(s) do you own? (circle all that apply)*
   (U-Lock) (Cable Chain) (Other- please specify):_____

8. *How much is your current bike lock worth? (If applicable)*

($1-$25.99) *($26-$50.99)* *($51-$75.99)* *(More than $76)*

9. *Please indicate the degree to which you agree with each of the following statements:*

a. *I often worry about my bike being stolen:*

☐Strongly Disagree ☐Disagree ☐Neutral ☐Agree ☐Strongly Agree

b. *I lock my bike every time I walk away from it:*

☐Strongly Disagree ☐Disagree ☐Neutral ☐Agree ☐Strongly Agree

c. *My bike seat is very comfortable:*

☐Strongly Disagree ☐Disagree ☐Neutral ☐Agree ☐Strongly Agree

d. *I often forget the key to my bike lock:*

☐Strongly Disagree ☐Disagree ☐Neutral ☐Agree ☐Strongly Agree

e. *It is an inconvenience to carry around my bike lock:*

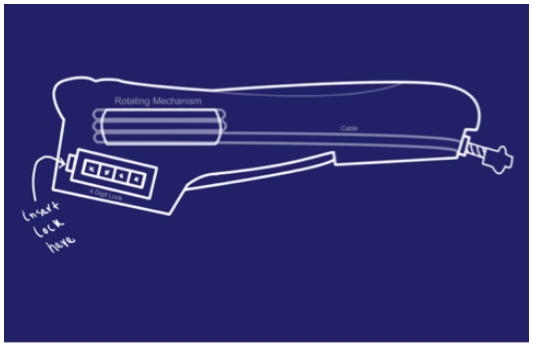
☐Strongly Disagree ☐Disagree ☐Neutral ☐Agree ☐Strongly Agree

10. *When purchasing a bike lock, please rank the importance of the following attributes on a scale from 1-5, using each number only once.* ***(1=worst attribute à 5=best attribute)***

____Weight ____Portability ____Safety ___Strength ___Ease of Use

Product Concept Design and Visual

Our Product: The ***SecuriSeat*** ***is a bike seat with a lock incorporated into the bottom of the seat****. When you want to lock your bike, you* ***pull the retractable cable*** *out of the seat, secure your bike, and then lock it back into the* ***four-digit combination lock****. The SecuriSeat,* ***universally adaptable to any bike****, will ensure the safety of your bike, as well as your bike seat.*



11. *Now that you have reviewed our product concept, how interested would you be in our product if it became available?*

Not Interested				*Very Interested*
1	*2*	*3*	*4*	*5*

Purchase Intent and Price

12. *What would you expect to see our product sold for at retail? (please circle one)*
($41-$50.99) ($51-$60.99) ($61-$70.99) ($71-$80.99) ($81-$90.99)

13. *At the price you just indicated, how likely would you be to buy our product?*

Definitely Not Buy				*Definitely Buy*
1	*2*	*3*	*4*	*5*

a. *Would you buy our product for someone else? If so, for whom? (please answer below)*

14. *Please provide a brief explanation as to why you would or would not buy our product.*

15. *If we were to use eco-friendly materials in our bike seats, would this change your intent to purchase?*

___ *My purchase intent would increase significantly*

___ *My purchase intent would increase slightly*

___ *My purchase intent would not change at all*

16. *If we were to organize a SecuriSeat Road Race and donate the proceeds to the World Bicycle Relief, a non-profit that provides aid to developing countries, would this change your intent to purchase?*

___ *My purchase intent would increase significantly*

___ *My purchase intent would increase slightly*

___ *My purchase intent would not change at all*

Attribute Ratings

17. *Please rate the following SecuriSeat attributes on a scale from 1-5, using each number only once.* ***(1=worst attribute à 5=best attribute)***

___*Weight* ___*Portability* ___*Safety* ___*Strength* ___*Ease of Use*

Product Name

18. *Which of the following names do you believe best fits our product?*

*(SafetySeat) (EfficienSeat) (SecuriSeat) (Other):*_____

Distribution Expectations/Habits

19. *Where would you expect to hear about our product? (please circle all that apply)*

(Television) (Radio) (Newspaper) (Word of Mouth)

*(Magazine) (Online) (Other):*_____

20. *Where would you expect our product to be sold? (please circle all that apply)*

(Specialty Stores) *(Catalogs)*

(Sporting Goods Stores) *(Mass Retail Store)*

(Online) *(Other):*_____

Demographics/Psychographics

For classification purposes please answer the following:

21. Age:

- ❑ *18-24*
- ❑ *25-34*
- ❑ *35-44*
- ❑ *45-54*
- ❑ *54-64*
- ❑ *65 +*

22. Household Setting:

- ❑ *Urban*
- ❑ *Sub-Urban*
- ❑ *Rural*

23. Total Household Yearly Income:

- ❑ *Less than $25,000*
- ❑ *$25,000-$49,999*
- ❑ *$50,000-$75,000*
- ❑ *More than $75,000*

24. Gender:

- ❑ *Male*
- ❑ *Female*