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Multi-Liner, a Customizable Cosmetic Product Which Includes Four Colors of Eyeliner in One Pen, Which adds carrying Convenience.

Physical/engineering/computer/mathematical

STEM Business Plan

Elevator Pitch: The *Multi-liner* is a lightweight, easy-to-use and easy-to-carry cosmetic pen. Until now, multiple eyeliner shades could not be carried in a single device; however, now they can be carried, hassle free, by women and men from teenage years through maturity. *Multi-Liner* is a pen that has four-color customizable compartments, each of which can hold a different shade of eyeliner in one device.

Part 2. Executive Summary:

Cosmetics are a prevalent aspect in today's society. People from all different races, genders, backgrounds, and classes use cosmetics in their daily routines. Additionally, there are many steps when applying makeup, but the main focus today is on the eyes. Women usually wear different colors of eyeliners; such as, blue, black, brown, etc. When traveling, women carry bundles of cosmetics in their makeup bags, including many different types of eyeliners to match their outfits. *Multi-Liner* features a variety of eyeliner colors with an easy click of a button. *Multi-Liner* is a product teens, women and men can use. *Multi-Liner* makes it convenient to carry around many eyeliner colors. *Multi-Liner* is also customizable; it allows the user to choose the colors that are included in their *Multi-Liner* cosmetic pen.

Part 3. Problem Summary and Proposed Solution:

Problem and Pain Points:

Throughout history, cosmetics have been an essential part of a woman's daily routine. In a study called, *The Reason Why Women Wear Makeup: A Descriptive Study,*" Raffy Jay Villapaña explains that ten out of forty, or twenty-five percent (25%) of women always wear makeup. Sixteen out of forty or forty percent (40%) of women usually wear makeup, and fourteen out of forty or thirty percent (30%) of women wear makeup occasionally (Villapaña). A major reason women wear makeup is because of media, friends, family, self-image, and work.

Women travel with an abundance of makeup when going on trips. Transportation Security Administration (TSA) limits the amount of liquids that can be brought onto the plane in a carry-on with its 3-1-1 rule. This includes cosmetics in liquid form such as eyeliner, nail polish, foundation and moisturizers. The rule states that any liquids must be in a resealable container that is 3.4 ounces or less and that all containers must fit in one clear, plastic, resealable one-quart-sized bag. (Peacock). *Multi-Liner* fits in a one-quart-sized bag and allows the customer to travel with a variety of eyeliners.

Another problem is women spend a lot of money on cosmetics. According to an article in Beauty World News, "Study Reveals the Average Woman Will Spend More of Her Life Wearing Make-Up than Not. It was discovered that the average woman spends \$198 on cosmetics in a typical year and has approximately 13 items in her makeup bag (Mychaskiw). Many of the 13 items in a makeup bag are seen two or three times, such as eyeliner. *Multi-Liner* lets the customer have multiple eyeliners in one pen rather than taking up space in a makeup bag with multiple eyeliners.

Proposed Solution:

Multi-Liner helps save money on cosmetics. It has four colors in one pen, which is convenient for the customer. *Multi-Liner* colors are customizable--allowing the user to choose which four colors to incorporate into their personal cosmetic pen. *Multi-Liner* is compact, therefore, when traveling it does not take up much space in a makeup bag. This creates extra space for other necessary items. When planning a trip and unsure of the eyeliner colors needed, *Multi-Liner* solves the problem. It is customizable, convenient to carry, and lightweight. A

survey was given to Hudson High School students ages 13 through 18, employees of the Friedman Search Group, and the Corporation Management Group ages 30-45. The compiled surveys showed that 52.9 percent of the women prefer the accessibility of four different colors of eyeliner in one pen (see Figure 1). The survey also revealed that 39.2 percent of the women spend approximately \$10 for just one eyeliner color. *Multi-Liner* is priced at \$9.99 and provides accessibility to four different colors of eyeliner. In addition, *Multi-Liner* includes colors that represent themes for holidays or special events. For instance, the New Year's colors feature “glittery blue,” “popping silver,” and two additional subtle shades. This proposed solution is not on the list of trademark and patents provided by the United States Patent and Trademark Office.

The following figures represent multi-generational responses to the author's original survey.

Would you like to access four different colors of eyeliner in one pen?

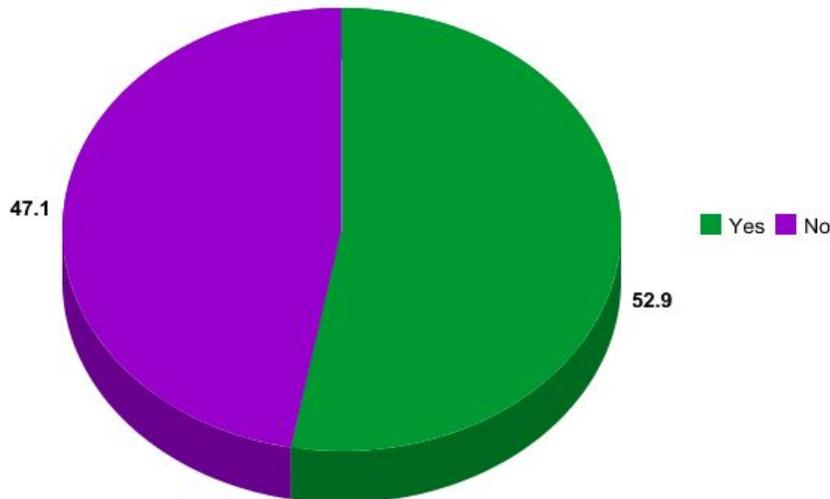


Figure 1

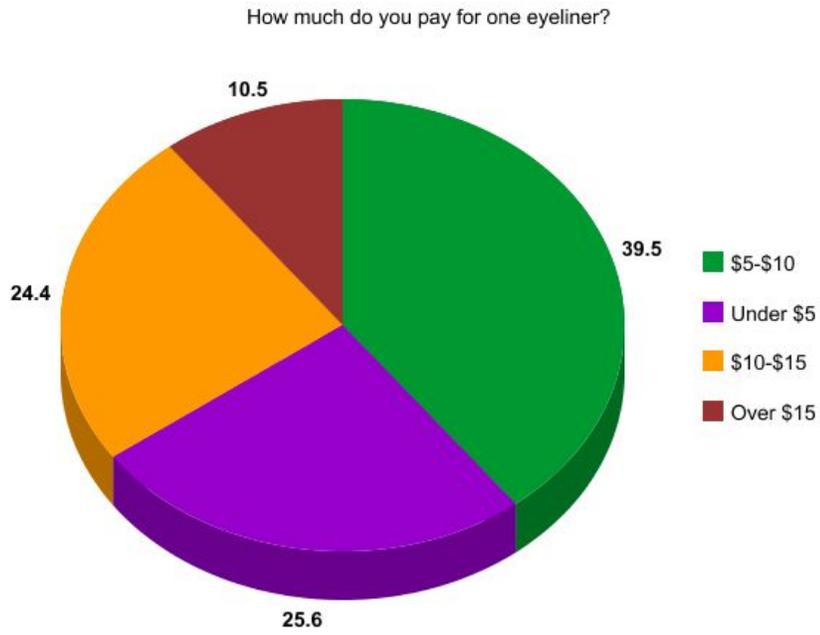


Figure 2

Do you use more than two eyeliners.

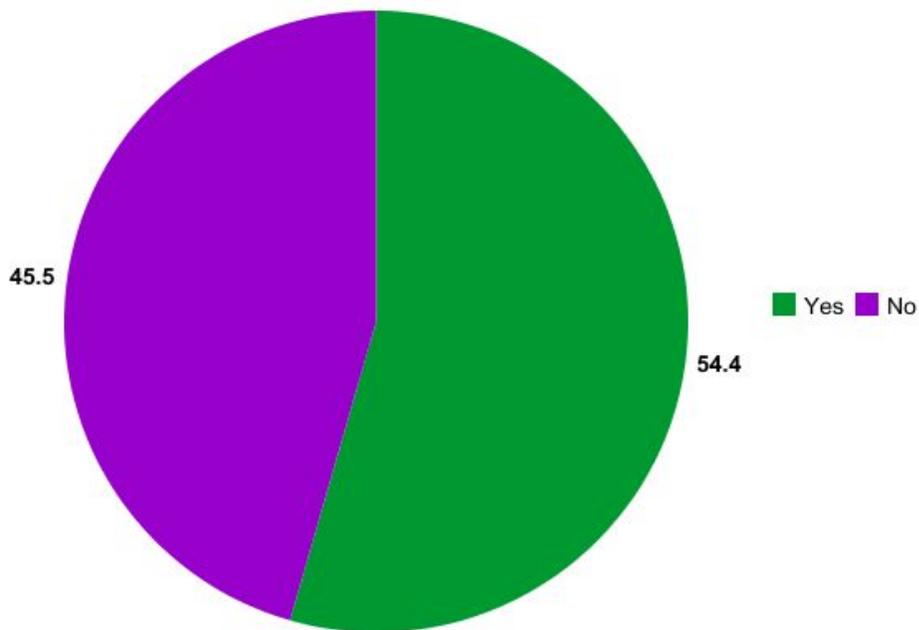


Figure 3

Part 4. Summarize the STEM Concepts and Principles Underlying the Overall Plan:

The STEM part of *Multi-Liner* incorporates the engineering behind a rotating cap (Figure 2). This device allows the consumer to “dial” a color for application. The case and the cap, in which the eyeliner is included, is transparent. Consequently, the consumer can see what color eyeliner they are using. Also, on the right side of the pen there is a knob that lets the customer slide down the color they have chosen from the rotation cap. When the customer selects the color of their choice and slides down the color desired, a soft tip of liquid eyeliner appears at the opposite end of the pen (Figure 3). Another STEM part of the *Multi-Liner* is how the eyeliner is contained in the pen itself. When using *Multi-Liner*, the consumer will not face any challenges. Also, the customer can buy a new color of eyeliner and replace any color that is finished or if they want a new color without getting a new pen. The engineering that is used in *Multi-Liner* already exists in the multi-colored pen, only adapted for the use of liquid eyeliner instead of writing ink. *Multi-Liner* is easy to use; the customer simply spins the cap to select a color and slides the knob, releasing the soft liner tip. The tip of the pen is soft making it is easy for the user to apply on the lids of their eyes, benefiting the customer as it eliminates pain or irritation.



Figure 1 *Multi-Liner* Figure 2 Twist the top Figure 3 Slide down the eyeliner
 Photos by Simreen Kala

Part 5. Commercialization Assessment of the Overall Plan:

Problem, pain point or market opportunity:

Throughout history, cosmetics have been an essential part of a woman’s daily routine. In a study called, *The Reason Why Women Wear Makeup: A Descriptive Study,*” Raffy Jay Villapaña explains that ten out of forty, or twenty-five percent (25%) of women always wear makeup. Sixteen out of forty or forty percent (40%) of women usually wear makeup, and

fourteen out of forty or thirty percent (30%) of women wear makeup occasionally (Villapaña). A major reason women wear makeup is because of media, friends, family, self-image, and work.

Women travel with an abundance of makeup when going on trips. Transportation Security Administration (TSA) limits the amount of liquids that can be brought onto the plane in a carry-on with its 3-1-1 rule. This includes cosmetics in liquid form such as eyeliner, nail polish, foundation and moisturizers. The rule states that any liquids must be in a resealable container that is 3.4 ounces or less and that all containers must fit in one clear, plastic, resealable one-quart-sized bag. (Peacock). *Multi-Liner* fits in a one-quart-sized bag and allows the customer to travel with a variety of eyeliners.

Another problem is that women spend a lot of money on cosmetics. According to an article in Beauty World News, “Study Reveals the Average Woman Will Spend More of Her Life Wearing Make-Up than Not. It was discovered that an average woman spends \$198 on cosmetics in a typical year and has around 13 items in her makeup bag (Mychaskiw). Many of the 13 items in a makeup bag are seen two or three times, such as eyeliner. *Multi-Liner* lets you have multiple eyeliners in one pen rather than taking up space in a makeup bag with multiple eyeliners.

Proposed solution:

Four colors of eyeliner in one pen is convenient for the customer, and the *Multi-Liner* is customizable so the customer can choose the four colors they want to incorporate in the eyeliner. *Multi-Liner* is compact, and when traveling it does not take much space in a makeup bag, which can save you money. If someone was planning to go out of town and was unsure of the eyeliner they were going to use, *Multi-Liner* is the way to go. It has a variety of colors to choose from and is customizable and convenient. In a survey given to Hudson High School students, Friedman Search Group and Corporation Management Group on February 9, 2016, 50.2 percent of the women prefer to access four different colors of eyeliner in one pen. Also, the survey revealed that 39.5 percent of the women spend \$10 for one eyeliner, *Multi-liner* includes four colors in one pen, which is more affordable than just using one eyeliner. In addition, *Multi-Liner* pen includes themes for holidays and special events. For instance, the New Year's *Multi-Liner* features glittery blue, popping silver, and two additional subtle shades.

Target customers and intended users:

This product targets the 95 percent of women who use make-up at least occasionally. The heaviest concentration of intended users is men, teens, women who travel for either business or leisure, women who carry makeup with them on the go, and women from age 19-40. High school is where girls experiment with makeup, try on different types of makeup and find what suits them best. The *Multi-Liner* is an easy way for women to carry their eyeliner in an organized and sophisticated manner. For example, flight attendants are always on the move; *Multi-Liner* makes carrying makeup hassle-free and easy for them to put in their carry on luggage. *Multi-Liner* is a perfect solution for those that have multiple cosmetic bags that need to be checked. Also, the survey indicated that employees at Friedman Search Group and Corporation Management Group

said that while traveling, it would be helpful to have a compact pen that includes multiple colors of eyeliner. When traveling many people do not have the time to organize their makeup; *Multi-Liner* provides ease for the consumer and keeps their cosmetics in an organized fashion. Women who need a quick touch up during a night out can simply use *Multi-Liner*. It is easy to carry in purses and is the perfect size 12cm long, which can fit in a purse. Regular eyeliner lasts six to eight months, but *Multi-Liner* with four colors lasts twice as long. One eyeliner ranges in price from \$3 to 30. However, *Multi-liner* targets a suggested retail of approximately \$9.99, very much on the lower end for traditional eyeliner.

Competitors:

Multi-Liner is an innovative product. However, it does have some competitors, including Cover Girl, Maybelline, and L'Oreal who each have two-color pencil eyeliners. On the other hand, *Multi-Liner* includes four colors and allows the customer to choose their own colors and build their own *Multi-Color* liner. Looking at the two-color pencil eyeliner, which costs \$6.99, many times the customers do not get the two colors they want. *Multi-Liner*, being more convenient and having four colors, only costs a few more dollars than the price for two. All these companies have one eyeliner and for every different color the customer wants, they have to purchase separate eyeliner, which can be quite expensive. *Multi-Liner* lets the consumer choose what color they want and the liquid eyeliner is easy to assemble in the pen. Companies such as L'Oreal and Maybelline do not have liquid eyeliner that includes two or four colors. *Multi-Liner* lets the a customer use four liquid eyeliners, Self Magazine suggests "liquid eyeliner is long lasting once applied and creates a more defined and dramatic look". *Multi-Liner* is compact and easy to apply; with a click of a pen, and have eyeliner ready to apply. Companies such as L'Oreal and Maybelline have a cap that twists and then lets you apply the eyeliner. With the *Multi-Liner*, the customer can just slide down the knob and the eyeliner appears. *Multi-Liner* is convenient and easy for customers to use.

Customer value proposition & competitive advantage:

Multi-Liner is a company that provides four different colors of eyeliner in one compact pen. Looking at several companies selling cosmetic products none of the companies included four colors of eyeliner in one pen. The strength of the *Multi-Liner* is that it is the only company that sells four colors of liquid eyeliners in one compact pen. There are companies that sell two colors of eyeliner in one pencil eyeliner, but many times the customer does not like both colors included in the two-color pencil eyeliner. *Multi-Liner* is customizable, meaning the customer can include any four colors they want in their eyeliner. The customer can refill the *Multi-Liner* whenever they want. *Multi-Liner* lasts longer than regular eyeliner, it lasts twice as long since it includes four colors. Another strength of the *Multi-Liner* is its affordability. Companies like Maybelline, L'Oreal, and Revlon have high prices; many people can't always afford the eyeliner. Since most are single colors Maybelline sells one eyeliner for \$5.59, L'Oreal sells one eyeliner for \$7.99 and Revlon sells one eyeliner for \$8.39. The translucent cover where the *Multi-Liner* is contained makes it easy for the customers to see what color they are buying, and gives them a

clear view of what the color actually looks like. *Multi-Liner* makes using eyeliner suitable to all women on every occasion.

Principal revenue streams expected:

Multi-Liner is sold directly to the customers through the *Multi-Liner* website. One of the sources of profit is recurring revenue. Recurring revenue is the portion of a company's revenue that is highly likely to continue in the future. This is revenue that is predictable, stable, and can be counted on in the future with a high degree of certainty (Investopedia). Another revenue stream that *Multi-liner* has is transaction-based revenue. Transaction-based revenue is based on predictable sales of goods (Revenue Models, Product Pricing & Commercializing New Technology). The shipping cost and inventory is the transactional revenue stream, since there is no set cost for how much inventory is bought, it is included in the transaction revenue stream. If the *Multi-Liner* is sold by marketing the *Multi-Liner* on Facebook, the people who like the product can contact the number on the advertisement and purchase a *Multi-Liner*. *Multi-Liner* creates a revenue stream through recurring revenue, transaction revenue, and selling the product online.

Principal startup and operating costs expected to be incurred:

Multi-Liner consists of startup costs such as product development, marketing, cost of production, insurance and efficiency testing. The *Multi-Liner* is sold online, and there are three main startup costs for online selling, product development, marketing, and business expenses. The product development cost is \$15. Since the ingredients for the *Multi-Liner* are already created the product development cost is low. Marketing is an integral part of selling a product; the *Multi-Liner* is marketed via Facebook. The average CPC (cost per click) is \$0.31 cents (Prosser). Every time the *Multi-Liner* advertisement is clicked Facebook gets a fee of \$0.31. Another startup cost for the *Multi-Liner* is insurance, general liability insurance is needed experiences an adverse reaction the general liability insurance prevents the *Multi-Liner* from getting sued. The general liability insurance costs \$575.16 (2014 General Liability Insurance Cost Analysis). Since the formula of the *Multi-Liner* is already created there is no startup cost for cosmetic formulation. Presentation efficiency testing is the biggest startup cost for the *Multi-Liner*; SPF (sun protection factor) ingredients include oxybenzone, avobenzone, octisalate, octocrylene, homosalate and octinoxate. The cost of getting SPF testing is \$3000-\$4000, and testing the products costs \$800-\$15000 (Patton). *Multi-Liner* is sold on its own website which costs approximately \$5,640- \$11,400 to develop. Web developing companies cost \$60-\$200 per hour to make a website (Parr). The majority of the cost for production is inventory. One eyeliner costs \$2.19 to produce with 12,000 eyeliners in one box the inventory is \$26,280. The startup costs for the *Multi-Liner* include marketing, insurance, cost of production, efficiency testing, and business expenses.

Part 6. Business and Financial Proof of Concept:

Marketing, sales and pricing strategies to bring your product or service to market:

Marketing is done through emailing, social media and word-of-mouth. *Multi-Liner* has its own website where customers can view the product and if interested in buying, they can visit the link for the website and order online. In a few years when the product has consistent sales, *Multi-Liner* will go from online sales to local drug stores such as CVS, Walgreens, and Ulta. The *Multi-Liner* is set at a price of \$9.99, since most customers pay \$10.00 for one eyeliner; *Multi-Liner* is affordable and convenient.

Discussion about your operational plans for developing and making your product or service into a tangible commercial venture:

Multi-Liner is developed and manufactured offshore. The inventory is shipped to America and is kept in a secure warehouse and sold online. Once the *Multi-Liner* online sales are steady and consistent, the product will be introduced to stores such as CVS, Walgreens, and Ulta. As the business grows and the *Multi-Liner* has a strong customer base, *Multi-liner* will get in contact with cosmetic companies such as L'Oreal, Maybelline, and Revlon. Also, *Multi-Liner* is going to develop other useful and convenient products to make carrying around makeup convenient.

Significant risks and uncertainties you expect to face in bringing your venture to market:

There are many risks and uncertainties that are faced when a new product is developed. One risk with starting a business is how to raise enough money to purchase inventory. Also, if the inventory is developed does it have enough customers to keep it in business. *Multi-Liner* is a product that has never been seen before, therefore developing a customer chain, and trust of the customer can take a year or more. An allergic reaction to the product and a possible lawsuit are a potential risk as they are with any makeup product.

Amount and type of investment expected to be required to bring your idea to market:

Multi-Liner is developed offshore which makes the product less expensive to produce and the savings are passed on to the customer. The general liability insurance costs approximately \$600 it is coverage that can protect you from a variety of claims including bodily injury, property damage, personal injury and others that can arise from your business operations.(2014 General Liability Insurance Cost Analysis). Testing the products cost from \$800 to \$15000 (Patton). *Multi-Liner* is sold on the website which costs approximately \$5,640 to \$11,400 to develop (Parr). An integral part of having a website is keeping it updated at all times. The cost of keeping the website up-to-date is \$500 a month (Parr). The majority cost for the *Multi-Liner* goes towards inventory.

A three-year financial projection that confirms the financial feasibility of bringing our venture to market on a sustainable basis:

Multi-Liner								
Financial Projections								Revised February 2016
For the First Four Quarters and First Three Years								
						Totals For		
		Quarter 1	Quarter 2	Quarter 3	Quarter 4	First Year	Year 2	Year 3
Sales and revenues		\$0	\$0	\$0	\$1,000	\$15,000	\$20,000	\$45,000
Costs and expenses:								
Cost of sales		\$0	\$0	\$150	\$210	\$360	\$450	\$600
Selling, marketing and advertising costs		\$113	\$113	\$113	\$113	\$453	\$453	\$453
Application Maintenance		\$500	\$500	\$500	\$500	\$500	\$500	\$1,053
Total costs and expenses		\$613	\$613	\$763	\$823	\$1,312	\$1,403	\$2,106
Pre-tax cash profit (loss)		(\$613)	(\$613)	(\$763)	\$177	\$13,688	\$18,597	\$42,894
Investment required to start your business:						Year 1	Year 2	Year 3
Cost of developing prototype products		\$20.00				\$20.00	\$0.00	\$0.00
Legal, patent or professional costs		10,400	0	0	\$0	\$10,400	\$0.00	\$0.00
General Liability Insurance		\$575.16	\$575.16	\$575.16	\$575.16	\$575.16	\$575.16	\$575.16
Product Testing		\$19,000.0				\$19,000.00	\$0.00	\$0.00
Other investment costs						\$0	\$0.00	\$0.00
Projected total investment						\$29,995	\$29,995.1	\$29,995.1
Projected return on investment (Profit/Investment)						45.6%	62.0%	143.0%
Projected total investment						\$59,991	\$59,991	\$59,991
Projected return on investment (Profit/Investment)						0.00%	0.00%	0.00%

Part 7. Acknowledgements:

Thank you Ms. Banks-Burke, Mrs. Brest, Irveen Singh, Ms. Wasserman and mentors for providing the students with great learning opportunities and help develop a business plan.

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