Section 2 Team 8 Spring 2020

Business Plan Business Name: ExtraEyes Business Idea: Eye-Tracking Dashcam



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### **Executive Summary**

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	Business Description: ExtraEyes is an eye-tracking
	technology company that aims to reduce the rate of
Management:	accidents caused by distracted driving. In order to achieve
-	this goal, we have developed a high-quality product which
-General Manager	alerts and also records distracted drivers helping ensure the
	driver's safety and prevent a potential collision.
-Marketing Manager	Product: For \$349.99, ExtraEyes includes eye-tracking
0 0	technology and a high-resolution camera that records real-
-Operations Manager	time footage of both the road and the driver. Our product is
1 0	compact, stylish and securely attaches to the dash of any
Industry: NAICS Code- 333316 [Motion]	vehicle. This product uses motion sensors to automatically
picture camera manufacturing]	turn on/off. We project our sales volume to increase from
× 01	4,021 to 105,362 units by our fifth year of operations due to
Number of Employees: 28 Full Time	increasing distribution channels. We are able to manufacture
Employees	this product for a total variable cost per unit of \$198 in the
1 5	first year. We reduce unit variable cost in the fifth year to
Amount of Financing Sought:	\$159 due to sales volume increase.
\$6,500,000	Competitive Advantage:
	ExtraEyes is the first patented eye-tracking product for
	vehicles that comes with complementary licensed software.
Investment Sources:	These legal resources will prevent our competitors from
Our company sources \$3,500,000 from	imitating our product. Since we have developed a new
issuing Common Stock. Year three we	technology, we will have the opportunity to capitalize on a
source \$3,000,000 from a SBA 7a loan.	relatively untapped market.
	Markets: Our target market consists of the parents of
Use of Funds:	inexperienced drivers who fall in the middle to upper
Our company uses the \$3,500,000 to fully	socioeconomic class. The potential market size of our initial
cover expenses for years one and two.	targeted segment is 1.8 million people with a declining
The \$3,000,000 sourced from the loan is	growth rate of 3.24% over the next five years.
used to purchase the building in year	Geographically, our company will target consumers located
three.	in Northern Virginia and the District of Columbia. By year
	five, we will expand to other major metropolitan areas in
Product Selling Price: \$349.99	close proximity to our warehouse in Delaware such as New
U	York, Philadelphia, and Baltimore.

**Distribution Channels:** Our company will create an online website where customers will be able to purchase our product directly from the site. During our 3rd year of sales, we plan to begin selling our product on amazon and other wholesalers at retail price.

**Competition:** Dash cameras are our direct competition since they are a cheaper alternative to our product. However, our product's competitive advantage is our eye-tracking technology, which provides a number of proactive safety measures in addition to having 2 built in dash cameras. The main indirect competitors to our product are mobile phone applications that disable a driver's phone while the car is in motion, but there are so many other factors that distract drivers. Since our eye-tracking system accounts for any variable that takes a driver's eyes off the road the additional benefits of our product outweigh the costs.

Financial Projections (Unaudited):							
	2020	2021	2022	2023	2024		
Revenue: EBIT	\$1,407 \$(2,441)	\$3,872 \$(1,072)	\$10 <b>,</b> 100 \$977	\$23,626 \$4,448	\$30,027 \$6	(dollars in thousands)	

#### Narrative

Hello, we are Group 8 and we have developed, ExtraEyes, a revolutionary product which has the potential to save lives every day. Several years ago, my friend Kayla was texting and driving while taking her sister to soccer practice. When the next thing she knew, they were lying upside down in her car. Luckily both of them were unharmed, but Kayla's car was totaled. She is not alone: each day in the United States, approximately nine people are killed and more than 1,000 injured in crashes that are reported involve a distracted driver (CDC 2019). We all fall victim to distracted driving, whether it's quickly glancing at our cellphones or occasionally dozing off during long drives. ExtraEyes is designed using patented eye-tracking software, camera recorders, and an alert system to prevent the dangers of distracted driving.

Our eye-tracking technology was developed to ensure that the driver's focus is on the road. Our product is a thin, unobtrusive device that fits securely on the dashboard of any vehicle. It uses motion sensing technology to automatically activate when the car is in motion and alerts the driver with a friendly tone when their eyes are off the road for more than two seconds (NHTSA 2013). Our product uses high-resolution cameras to record the driver as well as the road ahead to evidence who is at fault if there is an accident.

Our competitive advantage stems from our patented eye-tracking technology software integrated into a state-of-the-art driver's assistance device. By our patented product design and licensed software, our company will strategically block new entrants from imitating our product. Our core competency relies on innovation in emerging technologies; we will continuously be at the forefront of our industry by investing in our employees' human capital.

Our company is a great investment opportunity because no other technology offers the same safety features as ExtraEyes. Our company enters the market with no direct competitors, which

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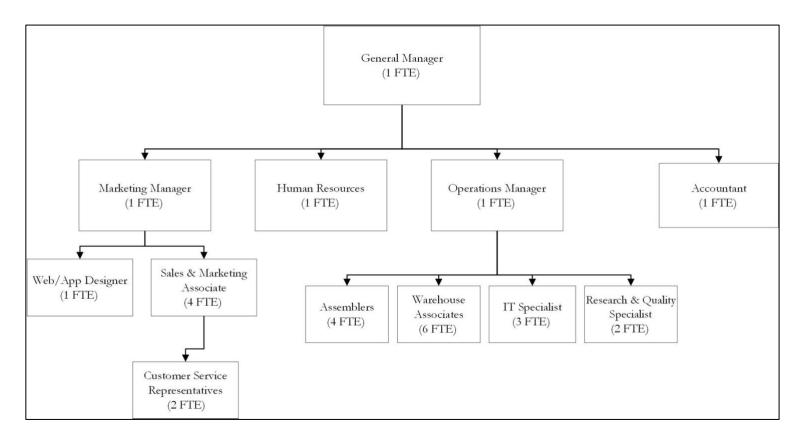
enables us to capitalize in new, untapped markets. Even though our company won't be profitable until our third year of operation, we plan to distribute shareholder dividends for all five years.

Since we are bringing a new technology to the market, our company uses a differentiation strategy. We plan to differentiate our product from existing competitors, such as dash cams, through our quality of inputs and our patented eye-tracking device and software. We will hire managers with past startup experience and employees with information technology skills. After the first six months of research and development, we plan to implement a price skimming model.

Our manufacturing and office location will be in New Castle, Delaware. Delaware is considered a favorable tax shelter, which helps decrease our property and net income taxes. Operating out of Delaware allows us to physically reach our target markets in Northern Virginia and Washington DC with low shipping costs and lead times.

We are an American based company and do not engage in any outsourcing. Our first year's total variable cost per unit is \$198 if we domestically source our parts from U.S. distributors and manufacture our product in the Delaware. While it would be cheaper to outsource our manufacturing, we deliberately chose to keep our processes in the United States in order to support the domestic economy and ensure the quality of our inputs. This strategic decision adds value to our company because we are protected against tariffs and can market on a "buy-in-America" basis.

In the first two years, our company's expected net loss roughly totals \$3,000,000. In order to account for our initial startup costs, we plan to issue \$3,500,000 in stock. We will use these funds to hire quality employees and give them desirable starting salaries, which reduces employee turnover rates. In year three, we will take out a \$3,000,000 loan, expect recover all of our sunk costs, and generate a net profit from operating activities. In year five we are going to sell over 100,000 units and spend over \$2,500,000 million on advertisements. Such expansions and additional advertising efforts lead to a net profit of \$3,400,000 and an ending Retained Earnings of \$2,600,000.



As year one being a developmental year for our company, the first full year of selling and producing begins in year two, which is represented in this organizational chart. The total of 27 employees in year two increases to a total of 34 employees in year three. This change solely comes from 2 additional warehouse associates and 5 additional assemblers which are added to cover our required manufacturing output. All other positions are unchanged in year three including the Sales/Marketing and Customer Representatives staff because they are able control the onesegment expansion of market potential in year three. Starting in year four, we add 3 more Sales/Marketing Associates and 2 more Customer Service Representatives due to the transition of entering the wholesale market as well as reaching all four potential market segmentations. Because of the positive correlation between market share and demand for this product, the total required manufacturing output will steeply increase in year four. The bottleneck in our manufacturing process is the time it takes one assembler to connect wiring and attach technologies to the lithium battery, which is why the number of Assemblers increases from 9 to 24 beginning year four. In result of this increase in demand it is important to increase the number of Warehouse Associates from 8 to 18, and the number of IT Specialists from 3 to 5 to cover the number of units manufactured. The changes in year four create a total of 66 people employed. A similar increase to the Assembler, Warehouse Associate, and IT Specialist positions are made in year five due to increase in demand for this product. With all other positions held constant from year four to year five, the total number of employees in year five is 80 with a contribution of an additional 9 Warehouse Associates, 4 Assemblers, and 1 IT Specialist.

#### Exhibit 2: Employee Cost Chart

	Salary or				Total Cost	Total Costs
D :::	Wage		Mandatory Payroll	D G	per	All
Position	Range	Second Year Pay	Deduction	Benefits	Position	Employees
General Manager	150K- 200K	160K + 8k bonus= 168,000	FICA- 10973 FUTA- 42 SUTA - 248 WC- 755	Health-14K IRA-8400 *other benefits-8700	\$211,118	\$211,118
Operations Manager	100-130K	110K + 5500 bonus = 115,500	FICA- 8836 FUTA- 42 SUTA- 248 WC - 755	Health-14K IRA- 5775 *other benefits-6075	\$151,231	\$151,231
Marketing Manager	100-150K	110K + 5500 bonus = 115,500	FICA - 8836 FUTA - 42 SUTA- 248 WC - 755	Health-14K IRA-5775 *other benefits-6075	\$151,231	\$151,231
Human Resources Director	40-90K	63K + 3150 bonus = 66,150	FICA - 5060 FUTA - 42 SUTA - 248 WC - 755	Health-14K IRA-3,308 *other benefits - 3608	\$93,171	\$93,171
Accountant	50-115K	72K + 3,600 bonus = 75,600	FICA - 5783 FUTA - 42 SUTA 248 WC - 755	Health-14K IRA-3780 *other benefits-4080	\$104,288	\$104,288
Web App Designer	45-115K	75K + 3750 bonus = 78,750	FICA - 6024 FUTA - 42 SUTA 248 WC - 755	Health-14K IRA-3938 *other benefits-4238	\$107,995	\$107,995
Sales and Marketing Associates (4FTE)	30-90K	30K base + 4% **Commission = 68,717 + 3,436 bonus = 71,153	FICA - 5520 FUTA - 42 SUTA - 248 WC- 755	Health-14K IRA-3608 *other benefits-3908	\$100,234	\$400,936
Warehouse Associates (6FTE)	19-29K	11.50 per hour = 23,920 + 1196 bonus = 25,116 annually	FICA - 1921 FUTA - 42 SUTA - 248 WC - 502	Health-10K IRA-1256 *other benefits - 1556	\$40,641	\$243,846
IT Specialist (3FTE)	52-120K	75K + 3750 bonus =78,750	FICA - 6024 FUTA - 42 SUTA - 248 WC -755	Health-14K IRA-3938 *other benefits-4238	\$107,995	\$323,985
Assemblers (4FTE)	19-46K	15.50 per hour = 32,240 + 1,612 bonus = 33,852 annually	FICA - 2590 FUTA - 42 SUTA - 248 WC - 677	Health-10K IRA-1693 *other benefits-1993	\$51,095	\$204,380
Research and Development Specialist (2 FTE)	48-128K	70K + 3,500 bonus =73,500	FICA - 5623 FUTA - 42 SUTA - 248 WC - 755	Health – 14K IRA - 3675 *other benefits - 3975	\$101,818	\$203,636
Customer Service Representative (2FTE)	22-60K	32K base + 1600 bonus = 33,600	FICA - 2570 FUTA - 42 SUTA - 248 WC - 672	Health-14K IRA-1680 *other benefits-1980	\$54,792	\$109,584
TOTALS		\$1,411,480	\$149,188.00	\$500,580.00		\$2,305,401

Our salaries are based upon a range generated by U.S. Bureau of Labor Statistics, for all occupations located in Delaware. Contingent on these averages as well as being a start-up organization we provided second year salaries and wage rates for all employees. The hourly employees' annual wage costs were determined by multiplying the specific position wage rate per hour by 2,080 hours which is the designated number of hours worked by a single wage employee in a given year. Total employee cost is the addition of a yearly salary or wage rate plus mandatory payroll deductions determined by the stated calculation rates, established corporation benefits, and sales commission, if applicable. \*Benefits: 15 days paid vacation (3 weeks), 5 paid personal/sick days, individual health insurance \$14,000 for salary employees and 10,000 for wage employee (70% paid, 1500 deductible, 20/40 co-pay), life insurance (50,000 term coverage), IRA and Bonuses with 5% salary match, paid profit sharing matches salary at 3%, and a fixed wellness program and employee discount worth \$120 and \$80, respectively. \*\* Commission: Sales and Marketing Associates earn a commission of 4% of each employee's net retail sales. \$289,120 of grand total cost of wage employees for year two are reflected under COGS on page 15. Calculation Rates: FICA 0.0765 with 137700 cap, FUTA .0060 with 7000 cap, SUTA .0150 with 16500 cap, WC .02 with 37746 cap.

Segment Name	Size (# of People or Households in Segment)	Growth Projection	Description	Priority level for targeting	Justification for Targeting
Gadgets Galore (19)	~ 1,676,167 households	Declining population at the rate of 2.4% over the next 5 years	Demographics: Upper mid-class income, 45-64 age range, kids, college degree. Their life Style/Purchasing Media Habits: Owns lots of tech (3+ cell phones, 5+ TVs, Portable media/game player, watch children's programs online.	3	This particular segment is extremely tech savvy, continually updating their technologies. They are able to afford newer technologies which will benefit their lifestyles. In order to reach them we will advertise online.
High- tech Society (6)	~ 1,815,384 households	Declining population at the rate of 2.4% over the next 5 years	Demographics: Wealthy income, 45-64 age range, with kids, Graduate Plus. Life Style: Very informative of modern technology. Spend \$2500 or more on online purchases yearly, read online newspaper, has landline for security system, uses professional services for online investing.	2	This segment has one of the largest populations amongst the other market segments with which we are interested. This segment is tech savvy, so our company is compatible for the consumer because we are an emerging technology.
Smart Gamers (10)	~ 1,698,671 households	Declining population at the rate of 2.4% over the next 5 years	Demographics: Upscale, age range 35-54 years old, college graduate and some with higher degrees, high-tech, homeowners with kids. Lifestyle: have 5+ TVs, portable media/game player, spend heavily on consumer electronics for their kids.	4	This segment has a large market size that is concentrated in urban city centers so it will be easy to reach them. Smart Gamers' top priority is satisfying their children's' wants and needs with the latest technology. With a median household income of \$117,179 they would have no problem spending \$299 for a product that will ensure their children's safety behind the wheel.
Young Digerati (3)	~ 1,852,037 households	Declining population at the rate of 3.24% over the next 5 years	Demographics: Live in urban fringe neighborhoods, wealthy and married with kids. Age range of 35- 54 years. Have graduated college in which most have pursued a higher degree and they earn a median income around \$113,000 per year. Lifestyle: country clubbers who play tennis and spend excessive amounts of money shopping. Media and technology habits: trend followers and up to date on the new technologies.	1	With three of the top 5 counties of this target segment being located within 20 miles of each other and being a tech-savvy segment we can advertise online- -primarily through: Reddit, Twitter, online newspapers, and Instagram. The cost to reach this segment will not outweigh the potential revenues we plan to receive. As mentioned, this is a tech-friendly segment and having a tech product makes this segment compatible for our product.

Year	Total Market Potential (# Customers) *	Market Share**	Annual purchase amount***	Annual Unit Sales (Wholesale)	Annual Unit Sales (Retail)	W/Sale Price†	Retail Price†	Annual \$ Revenue
2020	1,852,037	0.02171	0.2	NA	4,021	NA	\$349.99	\$1,407,230
2021	1,840,036	0.03006	0.2	NA	11,062	NA	\$349.99	\$3,871,693
2022	3,634,783	0.04342	0.2	NA	31,564	NA	\$319.99	\$10,100,310
2023	6,894,602	0.06012	0.2	41,450	41,450	\$269.99	\$299.99	\$23,625,910
2024	6,857,688	0.07682	0.2	52,681	52,681	\$269.99	\$299.99	\$30,027,030

Exhibit 4: Market Quantification

In our first two years, we will be focusing our Market Potential on the Young Digerati Market. In the U.S. this market consists of 1,852,037 households. At the beginning of year three, we will expand to our secondary market potential, which is the High-Tech Society market. High-tech society will add 1,806,670 to our total market potential. Starting in year four and continuing in year five, we plan to transition our product towards the attention of wholesalers, which is why we took the sum of top four target market segmentations.

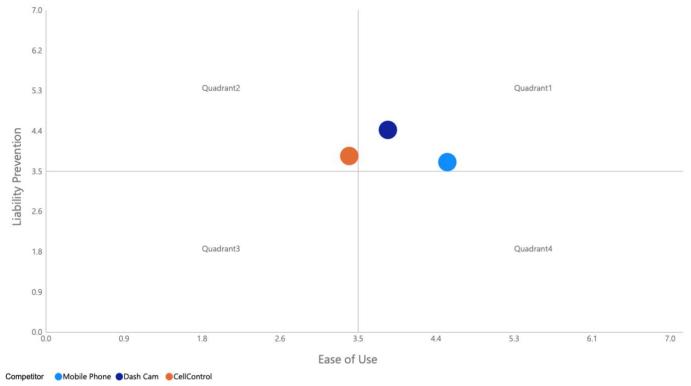
We projected our market share to be 2.17% for year one. Assuming that after spending around \$300,000 marketing our product in year one, our market share would increase. We believe that our increase in market share would come from a percent increase in likeliness to try our product. More than half of our respondents (60%) were open to or likely to try our product but not one hundred percent willing. We assumed that after our first year we would acquire 5% more people from 'likely' to 'very likely' to try our product after awareness and advertising. Meaning the original 13% respondents very likely to try our product would increase at a fixed rate of 5% through year two. With the decrease in price starting in year three we project our market to increase by 8%. Starting in year four we plan to sell our product to wholesalers, and we assume this will naturally bump our market share up as well. Due to a decrease in price, there will be an increase in the willingness to try our product. We assume that a 10% increase in 'very likely' to try our product starting year 4.

We are working under the assumption that most of our consumers are expecting a product with useful life of about five years before replacement. Therefore, people are buying our product once every five years or 20%. However, the Research and Development of our product will consist of the first 6 months of year 1. So, our unit sales will only be for the second half of year 1.

By our third year we assumed we established our two-top priority market segments, Young Digerati and High-Tech Society. Therefore, our retail sales levels in year 4 and 5 will be similar to year 3 retail sales in those two segments. In addition, we will expand to our final two market segments (Gadgets Galore and Smart Gamers) which will add approximately 16% more to our established retail sales alone in years 4 and 5. The retail sales will make up 50% of our total unit sales and the remaining 50% of our unit sales will come from wholesalers in years 4 and 5 because our last two priority market segments, of whom we didn't advertise to, will be attracted to our product from wholesalers.

Year	Average Price	Total Fixed Costs	Unit Variable Cost			
2020	\$349.99	\$2,575,661.35	\$198			
2021	\$349.99	\$2,709,460.96	\$181			
2022	\$319.99	\$4,582,891.61	\$159			
2023	\$284.99	\$8,687,851.98	\$158			
2024 \$284.99 \$9,064,701.97 \$159						
We are under the assumption that warranty will be close to 1% of Revenue. We assume as the net sales increase the salaries of Managerial and Sales and Marketing Associates will also increase. In addition, we added salary and hourly						

#### Breakeven Analysis:



Average of Ease of Use and Average of Liability Prevention by Competitor

After calculating the mean of each attribute, we concluded that the ease of use and liability prevention have the highest average score. These two attributes give use insight on how to effectively prioritize the customers wants. The ability to turn on and off had the lowest average amongst the three products leaving this attribute the most desired. Liability prevention was rated the highest amongst the three attributes. Our plan is to prioritize both of these attributes. Our goal as a company, is to be at least on-par amongst our competitors in liability prevention as well as trying to capitalize-on the room for improvement for our product's ability to turn on/off.

#### Exhibit #6: Marketing Mix

#### Product/Service Branding

As a company, our goal is to ensure safety of drivers. Our brand name, ExtraEyes paired with our brand logo of an eye encapsulated in a shield like image evokes the idea of protection and safety. Our brand slogan, "Save Lives, Drive ExtraEyes" highlights the problem of unsafe driving habits and emphasizes our customer's need for this product. By branding our product in such a way we hope that our customers recognize the value that our product adds through enhancing vehicle safety.

#### Pricing

	2020	2021	2022	2023	2024
Unit Variable Cost:	\$198	\$181	\$159	\$158	\$159
Wholesale Price:	NA	NA	NA	\$270	\$270
Retail Price:	\$349.99	\$349.99	\$319.99	\$299.99	\$299.99

Our price is justified because we are first to the market with our unique eye-tracking technology. Since there will be no direct competition in the first few years we have decided to implement the demand-orientated approach of price skimming. Therefore, we are able to charge a high retail price in the first few years and then will gradually decrease our price overtime once more competitors enter the market.

#### Distribution/Location Strategy

Product Teams: For years one, two, and three we will sell our product directly to consumers from our online website. During years four and five our product will be available through wholesalers.

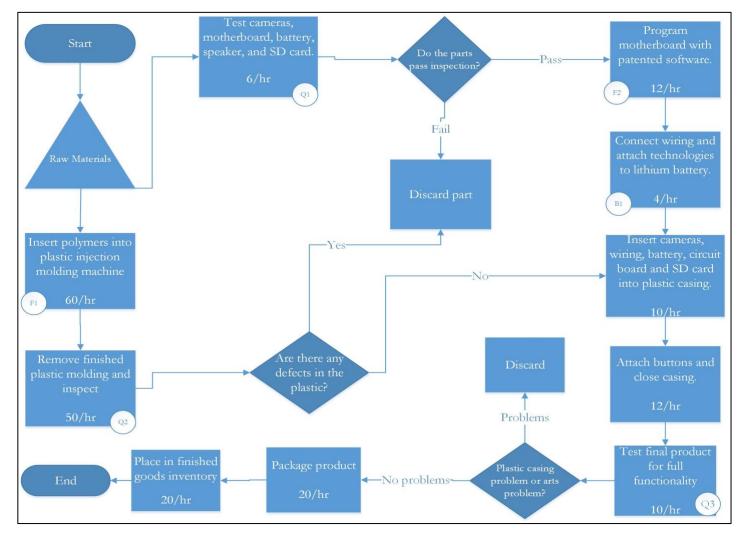
Service Teams: We chose to centralize our customer service and locate it at the same location of our physical warehouse in Delaware. Our website offers customer service options such as FAQ's in addition to a help forum and a phone number were customers will be connected with one of our live customer service representatives.

Promotional Strategy									
	2020	2021	2022	2023	2024				
Total IMC Budget:	\$301,558	\$69,690	\$363,611	\$850,533	\$1,080,973				
Online Newspaper	\$60,312	\$13,938	\$72,722	\$170,107	\$216,195				
Facebook	\$150,779	\$34,845	\$181,806	\$425,266	\$540,487				
YouTube Ads	\$90,467	\$20,907	\$109,083	\$255,160	\$324,292				
Half of our advertising budget will go towards Facebook advertising which gives us close to 120 thousand views from customers. We assume a majority of our target market are Facebook users, which is why we are focusing more so on Facebook advertisements.									

No. of Salespeople:	4	4	4	5	5		
	\$30,000 Base Salary + Commission (.1% of Net Retail Sales years 1 and 2, .075%						
Compensation Method:	Years 3-5)						

For the first three years our sales management plan is to advertise our product and create awareness of the ExtraEyes website, which is where a majority of our sales will occur in the beginning years. After year three, we will increase our distribution channels by selling to wholesalers, such as Target, Walmart, and Amazon. Additionally, our salespeople will be continuously developing a loyal customer base and generate sales by following potential leads, cold calling, and face-to-face client meetings.

#### Exhibit 7: Flow Chart



Quality Step	What is measured?	How often?	How will you ensure quality?			
Q1	Integrity and workability of technical parts.	Once per unit	Parts	ts that aren't working are disposed of so it is not used in the production of the final good.		
Q2	Plastic case design	Once per unit	The cas	ings with defects are disposed of. Have a perfect copy to compare newly made ones to.		
Q3	Overall functionality and consistency	Once per unit	Products that do not pass the final testing will be dispos Assembly workers will know how to test all parts of the product to ensure everything works			
Failure Point	Brief description	How will you prevent this failure?		How will you recover if this failure occurs?		
F1	Issues with the plastic injection molding machine.	Have properly trained workers operating the machine and follow all the steps in the machine manual to correctly and safely use the		Shut down the machine and stop operations temporarily while we work to deal with the failure. We will have a stockpile of casings so if it safe to continue operations while the machine is being fixed, we can continue with the rest of the manufacturing.		
F2	Camera's motherboard isn't properly programmed with our software.	machine. Having specialized IT employees who are trained with the program that we are putting in our product. Have more than one worker programming.		Let the IT workers come together and work through the issues as a group.		

Indicate the Dimensions of Quality on which you will focus.	Why is this dimension important, given your industry & target market?	Identify the Quality Step(s) on the Process Flowchart / Service Blueprint to which this corresponds.			
Responsiveness	ExtraEyes offers real time alerts based on whether the driver is distracted or not. For this dimension of quality our competitive advantage depends on accurate data and timely responses based on the interpretation of that data.				
Aesthetics	cs Our product design is sleek, small, and compact. Customers in our target markets prefer car accessories that do not inhibit their view while they're diving, and also do not take up a large amount of space.				
Reliability	This dimension deals with the consistency of our product performing accurately and providing the proper safety aspects every time it is in use. The reliability of our product is most important to the parents who are using our product to help keep their children safe.				
Special Features	Eye-tracking technology is a special feature that our product uniquely implements into our customers everyday lives. Additionally, ExtraEyes turns on and off automatically, has a high-resolution camera, Bluetooth paring capabilities, and complimentary app where users can view their driving data.	Q4			
to a specific activity on y Our company offers a 1-ye one year of the customer's	escribe any additional Proactive Quality Assurance Plan our Process Flowchart / Service Blueprint. ar replacement guarantee. So, if our product breaks or stops original purchase we will send the customer a new device free send the broken item back, so our operations department car.	working properly within e of charge. The customer			
Describe any reactive q quality goods and/or ser	uality assurance plans. Include a recovery plan should a	-			

If you will utilize a quality/process improvement methodology, indicate which:										
$\Box$ NA	🖾 TQM	🗆 Six Sigma	$\Box$ ISO	□ Benchmarking						
Provide a	Provide a specific explanation of how your chosen quality methodology relates to your business and how it									
will be app	plied:									
Total Qua	lity Managemen	t will help ensure th	ie long-term v	riability of our company through our emphasis on						
customer 1	relations and ma	aking sure that each-	-and-every cu	stomer is satisfied with our product. As our business						
matures ev	very employee ir	n our company will o	continuously ]	look for ways to increase efficiency and profitability						
while decr	easing unnecess	sary costs and waste	of resources.							

Exhibit 9A: Inventory, Suppliers, & Distribution

Item(s)	Supplier	Reason for selecting this	Supplier	Frequency of	System of	Mode of			
item(s)	(Location)	supplier	lead time	replenishment	Management	Transportation			
Raspberry Pi3, Power Supply, Speaker, Eye- Tracking NIR Camera,	Newark Avent Company (South Carolina)	Company has 4 of 7 components needed to engineer our product, fast and able to combine our shipping order	~7 days	~45 days	Fixed Order Interval	Highway			
Road Camera	DLSCorp. (Chandler, Arizona)	Cost Effectiveness and Compatibly with Raspberry Pi3	~7 days	~30 days	Fixed Order Interval	Highway			
Micro SD Card	Walmart (Smyrna, Delaware)	Cheapest price available for a 256GB card	~7 days	~30 days	Fixed Order Interval	Highway			
HDPE Injection Molding	Julier Technology (Fujian, CHN)	Strong polypropylene that fits in our plastic injection machine	~10 days	~30 days	Fixed Order Interval	Highway/Waterway			

### FINISHED GOODS INVENTORY

	Finished goods produced	Frequency of shipping	Average level of Finished Goods Inventory (10% of estimated sales for upcoming year)	Average level of safety stock (2% of estimated sales for upcoming year)
End of Year 1	~5.31 per hour	Once a Day, Monday through Friday	1,106 units	221 units
End of Year 2	~6.8 per hour	Once a Day, Monday through Friday	3,156 units	631 units
End of Year 3	~16.97 per hour	Once a Day, Monday through Friday	8,290 units	1,658 units
End of Year 4	~45.82 per hour	Once a Day, Monday through Friday	10,536 units	2,107 units
End of Year 5	~54.74 per hour	Once a Day, Monday through Friday	10,536 units	2,107 units

What is the lifespan of your finished goods inventory?	Finished inventory sitting longer than 1 year will be sold
How will you manage perishability of Finished Goods Inventory?	Finished inventory will be sold FIFO

### **DISTRIBUTION**

Transportation carrier	Reason(s) for selecting this provider/carrier	Frequency of Pick Up / Drop off
USPS	Free daily pickup service, free Flat rate padded envelopes	Monday to Friday
UPS	In year 4 and 5 we will be distributing wholesale to Target, Walmart etc. UPS can pick up freight (small fee) and deliver to distribution center	Monday to Friday

	Demand (per hr.)	Capacity (per hr.)	Utilization	Hours of Operation	Bottleneck & Description	How will you manage the bottleneck to ensure you can appropriately serve or supply your customers?
At the end of Year 1	2.09 units	6.9	5,127/6,624 = 77%	9am-5pm Monday - F <del>r</del> iday	Connect wiring and attaching technology to lithium battery	
At the end of Year 2	5.76 units	9.2	13,112/17,664 = 74%	9am-5pm Monday - Friday	Connect wiring and attach technologies to lithium battery	We will hire five more assemblers to meet the manufacturing requirement for year 3.
At the end of Year 3	16.43 units	20.7	32,553/39,744 = 82%	9am-5pm Monday - Friday	Connect wiring and attach technologies to lithium battery	We will hire fourteen more assemblers to meet the manufacturing requirement for year 4.
At the end of Year 4	43.17 units	55.2	88,291/105,984 = 83%	9am-5pm Monday - Friday	Connect wiring and attach technologies to lithium battery	We will hire only four more assemblers which will meet the manufacturing requirement for year 5.
At the end of Year 5	54.87 units	64.4	105,360/123,648= 85%	9am-5pm Monday - Friday	Connect wiring and attach technologies to lithium battery	After year 5, we will stabilize units manufactured by our current assembling and warehouse employees.

#### Calculations are for the parameters at end of Year 1.

Hours of operation/month	Demand/month	Demand/hour	Capacity/month	Capacity/hour	Utilization
1,920 / 12 = 160	4,021 /12 = 335.08	4,021 / 1,920 = 2.09	6,624 / 6 = 1,104	6,624/960 = 6.9	5,127 / 6,624 = 77%

## Describe adjustments you will make as resource requirements vary with time. Be specific regarding which key resources (beyond your bottleneck) will be adjusted, when and how. If you will make multiple adjustments, explain each.

At the end of year four our company decided to purchase a second plastic injection molding machine. Our decision was based upon both our forecasted demand in year 5 as well as a need to hold extra inventory on hand in case of demand variability. Our product has a useful life of 5 years; therefore, the unit sales are especially vulnerable to volatility. A single plastic injection molding machine can create 115,200 units annually. Our company is cognizant that the machine will not be utilized 100% of the time that is available. To account for this, we are purchasing a second machine in year 5 to cushion utilization limitations. By purchasing the second machine we will not only be able to meet our production plans but also prepare for future expansions and disposal of our first machine with a remaining useful life of two years.

# Additional resources (beyond your bottleneck) must be allocated appropriately to support operations. Identify which resources have a significant impact on capacity at start up and describe why these are appropriate amounts of resources at start up.

Our company is dependent upon both our warehouse associates and IT personnel to ensure production requirements are met through development and quality assurance. Our company relies upon our IT personnel to both, develop and perfect the software required for the device. The two quality checks at the beginning of our transformation and at the end will play an imperative role in supporting our operations. If we send out defected products to consumers, we risk our company's good will and reputation. In order to manage product quality and not significantly hinder our throughput rate, we must appropriately allocate and train the warehouse associates to effectively check the parts for quality and the finished product for customer requirements. Our three IT personnel in year one will suffice in developing and patenting our software in a reasonable amount of time so that our development and start-up phase does not become too time consuming. We expand to five IT personnel in year 5 to keep up with customer's demands of newer software and to ensure the software's quality.

How will you manage seasonality? NA

### Exhibit 11: Income Statement

ExtraEyes, LLC	2021	%	2022	%	2023	%	2024	%	2025	%
For year ended, December 31st										
Sales Revenue	\$1,407,230	100.00%	\$3,871,693	100.00%	\$10,100,310	100.00%	\$23,625,910	100.00%	\$30,027,030	100.00 %
COGS	794,207	56.44%	2,003,422	51.75%	5,024,174	49.74%	13,099,997	55.45%	16,760,678	55.82%
Gross Profit	\$613,023	43.56%	\$1,868,271	48.25%	\$5,076,136	50.26%	\$10,525,914	44.55%	\$13,266,353	44.18%
	. ,			1012071			. , ,			
General and Administrative Expenses										
Salaries and Wages	\$ 1,139,000	80.94%	\$ 1,139,000	29.42%	\$ 1,219,000	12.07%	\$ 1,583,000	6.70%	\$ 1,758,000	5.85%
Payroll Tax Expenses	138,678	9.85%	149,188	3.85%	189,963	1.88%	336,542	1.42%	375,735	1.25%
Employee Benefits and Retirement	486,542	34.57%	\$500,580	12.93%	559,194	5.54%	1,155,330	4.89%	1,381,578	4.60%
Commissions Expense	14,072	1.00%	38,717	1.00%	\$101,003	1.00%	118,130	0.50%	150,135	0.50%
General Insurance Expense	4,600	0.33%	4,600	0.12%	4,600	0.05%	4,600	0.02%	4,600	0.02%
Depreciation Expense	5,538	0.39%	6,330	0.16%	6,326	0.06%	41,117	0.17%	47,672	0.16%
Rent Expense	154,560	10.98%	157,651	4.07%	160,804	1.59%	-	0.00%	-	0.00%
Travel, Meals, and Entertainment	14,072	1.00%	38,717	1.00%	101,003	1.00%	236,259	1.00%	300,270	1.00%
Website Expense	10,000	0.71%	10,000	0.26%	10,000	0.10%	10,000	0.04%	10,000	0.03%
Advertising and Promotion Expense	301,558	21.43%	69,690	1.80%	363,611	3.60%	850,533	3.60%	1,080,973	3.60%
Taxes & Licenses	5,075	0.36%	75	0.00%	110,875	2.21%	75	0.00%	75	0.00%
Office Expense	27,048	1.92%	27,589	0.71%	28,141	0.28%	28,704	0.12%	29,278	0.10%
Warranty Expense	14,072	1.00%	38,717	1.00%	101,003	1.00%	236,259	1.00%	300,270	1.00%
Bonus Expense	71,778	5.10%	78,318	2.02%	105,226	1.04%	180,715	0.76%	217,877	0.73%
Operational Expense	140,723	10.00%	387,169	10.00%	1,010,031	10.00%	2,362,591	10.00%	3,002,703	10.00%
Shipping Expense	52,672	3.74%	144,916	3.74%	413,494	4.09%	543,000	2.30%	690,118	2.30%
Total General & Administrative Expenses	\$ 2,579,988	183%	\$ 2,791,258	72%	\$ 4,484,275	44%	\$ 7,686,854	33%	\$ 9,349,285	31%
Earnings Before Interest and Taxes	(\$1,966,966)	-139.78%	(\$922,987)	-23.84%	\$591,862	5.86%	\$2,839,060	12.02%	\$3,917,068	13.05%
Interest Expense	-	0.00%	-	0.00%	117,051	1.16%	217,262	0.92%	193,271	0.64%
				-						
Earnings Before Taxes	(\$1,966,966)	-139.78%	(\$922,987)	23.84%	\$474,811	4.70%	\$2,621,798	11.10%	\$3,723,797	12.40%
Income Tax Expense	-	0.00%	-	0.00%	41,546	0.41%	229,407	0.97%	325,832	1.09%
Net Income (Loss)	(\$1,966,966)	-139.78%	(\$922,987)	-23.84%	\$433,265	4.29%	\$2,392,390	10.13%	\$3,397,965	11.32%
Statement of Retained Earnings										
Beginning Balance of Retained Earnings	\$ -		\$(2,016,966)		\$(2,989,953)		\$(2,600,015)		\$ (446,863)	
Net Income (Loss)	\$(\$1,966,966)		(\$922,987)		\$433,265		\$2,392,390		\$3,397,965	
Dividends to Stockholders	50,000		50,000		43,326		239,239		339,797	
Ending Detained Family an	¢ (2.01(.0(()		¢(2,090,053)		¢() (00 015)		¢(11( Q(2)		¢ 0 (11 205	
Ending Retained Earnings	\$ (2,016,966)		\$(2,989,953)		\$(2,600,015)		\$(446,863)		\$ 2,611,305	

### Exhibit 12: Balance Sheet

	01/01/2021	%	12/31/2021	%	12/31/2022	%	12/31/2023	%	12/31/2024	%	12/31/2025	%
ASSETS												
Current Assets												
Cash and Cash Equivalents	-	0	\$1,521,687	85.87%	\$ 68,231	10.27%	\$3,859,304	85.07%	\$2,825,990	43.77%	\$5,669,095	58.43%
Accounts Receivable	-	0	-	0.00%	-	0.00%	-	0.00%	932,602	14.45%	1,185,278	12.22%
Inventory	-	0	218,509	12.33%	571,509	86.02%	659,695	14.54%	1,506,772	23.34%	1,675,803	17.27%
Short Term Investments	-	0	-	0.00%	-	0.00%	-	0.00%	-	0.00%	-	0.00%
Total Current Assets	\$ -	0	\$1,740,196	98.20%	\$639,740	96.29%	\$4,518,999	99.62%	\$5,265,364	81.56%	\$8,530,175	87.92%
Fixed (Long-Term) Assets												
Machinery and Equipment	-	0	29,300	1.65%	29,300	4.41%	29,300	0.65%	44,300	0.69%	74,800	0.77%
Buildings	-	0	-	0.00%	-	0.00%	-	0.00%	1,200,000	18.59%	1,200,000	12.37%
Land	-	0	-	0.00%	-	0.00%	-	0.00%	-	0.00%	-	0.00%
Total Gross Fixed Assets	\$ -	0	\$29,300	1.65%	\$29,300	4.41%	\$29,300	0.65%	\$1,244,300	19.27%	\$1,274,800	13.14%
Less: Accumulated		0										
Depreciation	-	0	5,538	0.31%	11,868	1.79%	18,194	0.40%	59,311	0.92%	106,983	1.10%
Net Fixed Assets	\$ -	0	\$23,763	1.34%	\$17,432	2.62%	\$11,106	0.24%	\$1,184,989	18.36%	\$1,167,817	12.04%
Other Long-Term Assets												
Long Term Investments	-	0	9,055	0.51%	9,055	1.36%	9,055	0.20%	9,055	0.14%	9,055	0.09%
Intangibles, Net of		0	ŕ		ŕ		ŕ		ŕ		ŕ	
Amortization	-		906	0.05%	1,811	0.27%	2,717	0.06%	3,622	0.06%	4,528	0.05%
Total Other Long-Term Assets	\$ -	0	\$8,150	0.46%	\$ 7,244	1.09%	\$ 6,339	0.14%	\$ 5,433	0.08%	\$ 4,528	0.05%
Total Assets	\$ -	0	\$ 1,772,108	100.00%	\$ 664,416	100.00%	\$ 4,536,443	100.00%	\$ 6,455,786	100.00%	\$9,702,519	100.00%
LIABILITIES												
Current Liabilities												
Accounts Payable	-	0	267,170	15.08%	132,465	19.94%	750,000	16.53%	800,000	12.39%	1,300,000	13.40%
Accrued Salaries and Wages	-	0	21,904	1.24%	21,904	3.3%	23,442	0.52%	30,442	0.47%	33,808	0.35%
Accrued Payroll Taxes and		0										
Benefits	-			0.00%		0.00%		0.00%		0.00%		0.00%
Notes Payable	-	0	-	0.00%	-	0.00%	-	0.00%	-	0.00%	-	0.00%
Current Maturity of LT Debt	-	0	-	0.00%	-	0.00%	290,809	6.41%	314,801	4.88%	340,772	3.51%
-		0										
Total Current Liabilities	\$-		\$289,073	16.31%	\$154,369	23.23%	\$ 1,064,251	23.46%	\$ 1,145,243	17.74%	\$1,674,579	17.26%
Long-Term Liabilities												
		0										
Maturities	-		-	0.00%	-	0.00%	2,572,207	56.70%	2,257,406	34.97%	1,916,634	19.75%
		0					, ,		, ,		, ,	
Total Liabilities	\$-		289,073	16.31%	154,369	23.23%	\$ 3,636,458	80.16%	\$ 3,402,649	52.71%	\$ 3,591,214	37.01%
STOCKHOLDER'S												
EQUITY												
Common Stock	-	0	3,500,000	197.5%	3,500,000	526.78%	3,500,000	77.15%	3,500,000	54.21%	3,500,000	36.07%
Retained Earnings	0	0	(2,016,966)	-136.00%	(2,989,953)	-450.01%	(2,600,015)	-57.31%	(446,863)	-6.92%	2,611,305	26.91%
Total Stockholders' Equity	\$ -	0	\$ 1,483,034	83.69%	\$ 510,047	76.77%	\$ 899,985	19.84%	\$ 3,053,137	47.29%	\$ 6,111,305	62.99%
Total Liabilities and		0										
Stockholders' Equity	\$ -		\$ 1,772,108	100.00%	\$ 664,416	100.00%	\$ 4,536,443	100.00%	\$ 6,455,786	100.00%	\$ 9,702,519	100.00%
Total Liabilities STOCKHOLDER'S EQUITY Common Stock Retained Earnings Total Stockholders' Equity Total Liabilities and	- 0 <b>\$ -</b>	0 0 0 0	289,073 3,500,000 (2,016,966) \$ 1,483,034	197.5% -136.00% 83.69%	<b>154,369</b> 3,500,000 (2,989,953) <b>\$ 510,047</b>	23.23% 526.78% -450.01% 76.77%	2,572,207 <b>\$ 3,636,458</b> 3,500,000 (2,600,015) <b>\$ 899,985</b>	77.15% -57.31% 19.84%	2,257,406 \$ 3,402,649 3,500,000 (446,863) \$ 3,053,137	54.21% -6.92% 47.29%	1,916,634 \$ 3,591,214 3,500,000 2,611,305 \$ 6,111,305	37.01% 36.07% 26.91% 62.99%

### Exhibit 13: Cash Flow Statement

## ExtraEyes

### Pro Forma Statement of Cash Flows

	12/31/2021	12/31/2022	12/31/2023	12/31/2024	12/31/2025
Cash Flows From (For) Operations					
Net Income	\$(1,966,966)	\$(922,987)	\$433,265	\$2,392,390	\$3,397,965
Depreciation & Amortization	6,443	7,236	7,232	42,022	48,578
Changes in Current Assets					
Increase in Accounts Receivable	-	-	-	(932,602)	(252,676)
Increase in Inventories	(218,509)	(353,000)	(88,186)	(847,078)	(169,031)
Changes in Current Liabilities					
Increase in Accounts Payable	267,170	(134,705)	617,535	50,000	500,000
Increase in Accrued Salaries and Wages	21,904	(134,703)	1,538	7,000	3,365
Increase in Accrued Payroll Taxes and Benefit		-	-		
Net Cash Flow From (For) Operating	\$(1,889,958)	\$(1,403,456)	\$971,384	\$711,734	\$3,528,202
				· · ·	
Cash Flow (For) From Investing Activities					
Fixed Asset Purchases	(29,300)	-	-	(1,215,000)	(30,500)
Short Term Investments	-	-	-	-	-
Long Term Investments	(9,055)	-	-	-	-
Net Cash Flow (For) From Investing	\$(38,355)	\$-	\$-	\$(1,215,000)	\$(30,500)
Cash Flow From (For) Financing Activities					
Issuance of Common Stock	\$3,500,000	\$-	\$-	\$-	\$-
Short Term Debt Borrowings	-	-			
Long Term Debt Borrowings	-	-	3,000,000	-	-
Long Term Debt Payments	-	-	(136,984)	(290,809)	(314,801)
Dividends Paid to Stockholders	(50,000)	(50,000)	(43,326)	(239,239)	(339,797)
Net Cash Flows From (For) Financing	\$3,450,000	\$(50,000)	\$2,819,689	\$(530,048)	\$(654,597)
Net Change in Cash	\$1,521,687	\$(1,453,456)	\$3,791,073	\$(1,033,314)	\$2,843,105
Beginning Cash Balance	\$-	\$1,521,687	\$68,231	\$3,859,304	\$2,825,990
Net Change in Cash	\$1,521,687	\$(1,453,456)	\$3,791,073	\$(1,033,314)	\$2,843,105
Ending Cash Balance	\$1,521,687	\$68,231	\$3,859,304	\$2,825,990	\$5,669,095

#### Exhibit 14: Financial Statement Notes

#### Income Statement Notes

Sales Revenue- We calculated our sales by multiplying our unit retail sales by our retail price and adding unit wholesales multiplied by wholesale price.

COGS- We multiplied our unit variable cost by our total units sold. Variable costs include purchasing 2 infrared cameras, standard camera, speaker, motherboard chip, SD card, and Battery. We make plastic molding to incase our product.

Salaries- The only increases to base salaries were made to the managerial positions. The significant increase in salary expense is due to the significant increase in number of assemblers, warehouse associates, and IT Specialists. Pavroll Tax Expense - FICA 0.0765 with \$137,700 cap, FUTA .0060 with \$7,000 cap, SUTA .0150 with\$16,500 cap, Workers Compensation .02 with 37,746 cap.

Employee Benefits and Retirement- IRA 5% salary match, paid profit-sharing matches salary at 3%, and a fixed wellness program and employee discount worth \$120 and \$80, respectively.

Commissions Expense- Sales and Marketing Associates are the only employees who earn a commission of 4% of individual net retail sales

Insurance Expense- Individual health insurance \$14,000 for salary employees and 10,000 for wage employee (70% paid, 1500 deductible, 20/40 co-pay)

Depreciation Expense- 7-year depreciation Straight line, Marcs- GDS, Mid-Quarter Convention 1st quarter, Asset class 30.2., for our 2 Plastic molding machines. One purchased in year 1 and the other in year 5 to meet

capacity. Years 4 and 5 includes depreciation on a 39-year Non-residential real property, Straight line, Marcs GDS, Mid-Quarter Convention 1st quarter. Purchased 3 forklifts, one year 1 another year 4 and a final one year in year 5.7-year depreciation Straight line, Marcs-GDS, Mid-Quarter Convention 1st quarter, 00.11 Asset Class

Rent Expense- 900 W Basin Rd, New Castle, DE is the warehouse and headquarters for our company in years 1-3 (LoopNet).

Travel, Meals, and Entertainment- Industry average of 10%

Website Expense- We allotted \$10,000 every year to continually improve the satisfaction of our retail customers using the site to buy our product.

Advertising and Promotion Expense- \$7.5 per estimated unit sales for the first year to introduce our product into the market. Years 2 and 3, we took the industry average of 1.8% of sales revenue. Finally, years 4 and 5 we expanded our market considerably and doubled our Advertising expense.

Taxes & Licenses- Standard licensing cost for Delaware business. \$5,000 for obtaining the license and \$75 to renew the license. Year three also includes patent renewal fees and guarantee expense for our loan.

Office Expense- Industry average for miscellaneous utilities.

Bonus Expense- 5% salary match for each employee

Operational Expense- Industry average is approximately 25% of Sales Revenue. Instead of manufacturing many of our components we purchase them from domestic manufacturers. Therefore, lowering operational costs as compared to industry average.

Shipping Expense- FOB destination for retail sales, \$13.1 per sale. FOB shipping point for Wholesales.

Interest Expense- No interest paid until our interest payments on the loan starting in year 3.

Income Tax Expense- 8.75% standard tax in Delaware.

#### Balance Sheet Notes

Cash and Cash Equivalents- High Cash in year 1 due to the \$3.5 million in common stock needed for expenses through year 2. Cash goes up in year 3 from our \$3 million loan to finance our expansion. We keep high cash on hand through year 5 in preparation for further expansion in the upcoming years.

Accounts Receivable- No credit sales on retail sales, so no receivables until year 4. Our wholesalers will pay us in inventory every 15th of the month. We offer credit terms for 60 days. So, 2/12 of our wholesales will be left in receivables at years end.

Inventory- We will be keeping approximately 10% of our estimated inventory for next year on hand. We want high inventory levels because of our product's high usage life, of which our sales are based off, could cause fluctuations in our actual sales vs. our predicted sales.

Short Term Investments- No short-term investments as we view our operations only requires long-term assets to be profitable.

Machinery and Equipment- 2 Plastic injection machines to produce our casing. The second purchased in year 5 to increase capacity due to higher sales. We purchased 3 forklifts to support our warehouse operations. The first in year 1, the second in year 4 and the third in year 5 to help manage our higher square footage warehouse and production

Buildings- Purchased warehouse and new headquarters at; 50 McCullough Dr., New Castle, DE, 19720 to support higher inventory levels.

Accumulated Depreciation- total of all depreciation expenses form long-term assets in each year.

Long-Term Investments- Patent and Copyright registration fees, including lawyer fees. We are considered a small business and received the lowest fees for registration.

Net Amortization- Straight-Line depreciation used on the patent and copyright. We assume the Patent and Copyright will generate revenue for our company for 10 years.

Accounts Payable- Keep around industry average in our first 3 years. Once we start making profit, we decrease our AP percentage of Stockholder Equity & Liabilities to about 10%. We have the loan and the profitability to do this. Accrued Salaries and Wages- We have the Cash flow to sustain payments to all our employees on time through the first 5 years. We will only have to accrue 1 week's salary at the end of each year for all salaried employees. Since they get their final paycheck of the year the 1 week before new year and we pay every 2 weeks. Wage workers will get paid weekly and will be paid the last day of the year

Accrued Payroll Taxes and Benefits- We have enough cash to pay all benefits when they are due. We will have no accrued benefits or payroll taxes.

Notes Payable - We have zero notes payable because we plan on financing with long term debt rather than short term.

Current Maturity of Long-Term Debt- The amount due on the \$3,000,000 loan 12 months after issuance. w

Long-Term Debt - Year 3 we apply and receive a SBA 7a loan to finance purchasing building. We are collateralizing Alex's home which exceeds 80%.

Common Stock - to finance our first two years fully we issue \$1.5 million to investors and own the other \$2 million to maintain majority ownership

Retained Earnings - Negative RE until Year 5 because we as a company give dividends.

#### Cash Flow Notes

Net Cash Flow From (for) Operations- In the first three years we are negative in cash flow the first two years prior to the issuance of the loan which allowed us to greatly expand operations. We added our back our depreciation of equipment and amortization of our patent and copyright. With our expansion in the later years, we increased wages. In year four we introduce wholesalers which marked the beginning of credit sales. We keep a cushion of inventory in case of demand or production fluctuations. Our product has a long useful life, so in theory we can sell a unit manufactured two years ago today.

Net Cash Flow From (for) Investing- In the first year we must purchase a plastic mold injection machine in order to produce our units and forklifts to efficiently support our operations in the warehouse. In year four we purchase a building and an additional forklift to support increased demand.

Net Cash Flow From (for) Financing- In year one we obtain our \$3.5m in equity in two ways, we as a group contributed \$2m and sought \$1.5m from angel investors. The logic behind the \$1.5m from angel investors was so that we could remain majority owners of the company. In year three we were able to secure a \$3,000,000 8-year loan compounded monthly. We paid out dividends to owners each of the five years and began making payments on the principal of the loan.

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ExtraEyes
Financial Ratios
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Table

	12/31/2021	12/31/2022	12/31/2023	12/31/2024	12/31/2025	Industry Average Ratios
Liquidity Ratios						
Current Ratio	0	6.02	4.14	4.25	4.60	1.67
Quick Ratio	5.26	0.44	3.63	3.28	4.09	1.05
Operating Cycle	200.84	287.86	178.89	127.93	151.49	47.24
Leverage Ratios						
Debt/Equity	0.19	0.30	4.04	1.11	0.59	0.93
Times Interest	0.17	0.50	1.01	1.11	0.37	0.75
Earned	0	0	5.06 x	13.07 x	20.27 x	32.32
Asset Management Ratios						
Inventory Turnover	1.82 x	1.27 x	2.04 x	3.02 x	2.63 x	11.1
Receivables Turnover	0	0	0	50.67 x	28.36 x	8.22
Fixed Asset Turnover	59.22 x	222.10 x	909.45 x	19.94 x	25.71 x	9.91
Profitability Ratios						
Gross Profit Margin	43.56%	48.25%	50.26%	44.55%	44.18%	13.00%
Operating Profit Margin	-139.78%	-23.84%	5.86%	12.02%	13.05%	9.05%
Return on Assets	-111.00%	-138.92%	9.55%	37.06%	35.02%	25.81%
DuPont Analysis						
Net Profit Margin	-139.78%	-23.84%	4.29%	10.13%	11.32%	14.50%
Total Asset Turnover	0.79 x	5.83 x	2.23 x	3.66 x	3.09 x	1.78
Equity Multiplier	1.19	1.30	5.04	2.11	1.59	1.93
Return on Equity	-132.63%	-180.96%	48.14%	78.36%	55.60%	49.70%

#### Exhibit 16: Financial Analysis

### Liquidity Ratios

• Our company's Current, Quick, and Operating Cycle ratios are about 3x the industry average. This is in large part because we are a start-up company and we had decided to fund our company with mostly long-term debt thus keeping our current liabilities lower in comparison to the industry. (Bizminer, 2019)

### Leverage Ratios

• Our company's debt to equity ratio is about half the industry average as our company was unable to secure a loan in the first two years of operations. Our business also prioritized paying off short-term debts such as accounts payable and accrued salaries and wages in order to maintain good relationships with suppliers and build trust amongst our employees. Our company's Times Interest Earned is about 2/3 of the industry average. As previously mentioned, our company is heavily financed with long-term debt making our interest expense as a percentage of sales roughly 4x the industry average from 2014-2018. Another reason for the higher TIE ratio is as a start-up we had to spend more comparatively on advertising.

### Asset Management Ratios

• Our inventory ratio is low due to our company's product having a useful life of 5 years, meaning replacement each year is not necessary for our consumers. We also decided to produce extra inventory in the case of unexpected sales fluctuations. Our high A/R ratio is because most of our sales are not credit sales; credit sales do not begin until year three when we introduce wholesalers. Our fixed asset turnover is higher than the industry because we decided to remain more liquid in case of changing market environments.

#### Profitability Ratios

• The gross profit margin starts out well, but the rest of the ratios start out negative in our first two years as we pay off debt and get the business established. However, our operating profit margin and return on assets increase steadily every year and begin to make profit in year 3. Our company's return on assets is higher than the industry average largely in part because of our total asset turnover being about twice the industry average. We were able to keep net income high by mostly financing through equity.

### DuPont Analysis

• Initially our company's profit margin was expectedly horrendous though it is important to take into consideration our development phase in year one. By year five, when we are well established with wholesalers, we were able to better our margins to within 3.2% of the industry average. In year three our Equity multiplier jumps by over 300%; this is also reflected in our D/E ratio which also increases exponentially. This is in large part due to the long-term \$3,000,000 loan our company took out in year three. Our A/R turnover ratio is much higher than the industry average in effect making our Total Asset Turnover being so high. Our A/R was so high because less than half of our sales were made on credit.

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My name is Alexander Davis I am from McLean, Virginia. After transferring from Drexel University and then spending a semester at NOVA community college, as a result of my father's illness, I ended up here at JMU as a finance major with a discipline in pre-law. I am a Philadelphia sports fanatic and fitness is one of my favorite pastimes.
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