

NOpaque

“Vision Without Limits”

St. Aloysius Gonzaga S.S
2024-2025

Founders

Rusiru | Ruvin | Atharv | Mohammed

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Value Proposition

Company Mission

Our mission is to revolutionize vision care by making it affordable, sustainable, and accessible to underserved communities while actively working on environmental protection.

Business Profile

We at **NOpaque** are selling eye-wear kits with an integrated self-testing kit to find a generalized prescription for those who do not have access to optometrist offices in the community. Our product is a sustainable eye-wear kit geared towards underserved communities. All kits allow for quality vision that is affordable worldwide.

UN Sustainable Development Goals

The eco-friendly eyewear kits are sustainable and enable access to clearer vision. The kit is directly concerned with Good health (Goal 3) and climate action (Goal 13) UN goals. The provision of affordable and easily accessible eyewear addresses the issue of reduced inequalities (Goal 10) as it eliminates vision disparities around the world.

Social Construction: Empowering Through Existence

At **NOpaque**, our impact extends beyond providing affordable and sustainable eyewear. Existing as a socially conscious company, we actively create opportunities for underprivileged communities.

- **Job Creation:** Our production process intentionally integrates underprivileged individuals by offering fair employment opportunities, from assembling kits to managing logistics
 - We aim to create ~500 new jobs opportunities within the first 2 years
- **Community Empowerment:** Through partnerships with local NGOs and community centers, we provide training and skill development, empowering individuals to achieve financial independence

- **Sustainable Growth:** By prioritizing these communities, we contribute to a cycle of empowerment, where individuals not only gain employment but also uplift their local economies

Sustainability

Over 4 billion people worldwide rely on eye-correcting glasses, made from materials like polyethylene, Trivex, polycarbonate, and high-index polymers, which take an astonishing ~4,000 years to decompose. With over 4 billion people worldwide requiring corrective lenses, the environmental toll of conventional eyewear is staggering. In North America alone, over 4 million glasses are discarded annually, contributing to landfills, sitting there for thousands of years. NOpaque offers a revolutionary solution with bamboo frames—a sustainable resource that decomposes naturally within 3–5 years. Combined with biodegradable organic lenses, our glasses break down ~20x faster, decomposing in just 150–200 years. By choosing NOpaque, consumers not only gain affordable and effective eyewear but also actively reduce waste, ensuring their glasses won't sit in landfills for thousands of years.

Competition

Unlike optometrist clinics or other eyewear providers, NOpaque combines affordability, sustainability, and remote self-testing accessibility tailored for underserved communities which makes it a game changer.

Marketing

Target Market

- **Underserved communities**
 - Rural Areas
 - Low-income Urban Areas
 - Developing Countries
 - Schools in underserved regions

- **Humanitarian Organizations**

- Nonprofits & NGOs
 - UN, T.W.E.C.S, Seva Foundation, OneSight
- Local Champions:
 - Engage trusted community figures like teachers, healthcare workers for promotion in more localized areas

- **Sustainability-Oriented Consumers**

- Eco-Conscious Buyers
- Zero-Waste Advocates

Product

- **Glasses**

- Our product is a sustainable eyewear kit geared towards underserved communities
- Includes bamboo brown frames and a size-adjusting mechanism to accommodate everyone
- Includes easy-to-assemble lenses and frames that are also adjustable
- All kits allow for quality vision that is affordable for everyone around the world

- **Custom Eye Test**

- The paper contains a series of numbers and symbols. Each number or symbol is repeated multiple times, but with decreasing size or clarity (Snellen test)
- **The Distance**
 - The detached string is used to measure 6 feet or 1.83 meters from a wall
 - This distance will be marked with a pre-cut length for the string itself

- **The Procedure**
 - You stand at the marked distance and cover one eye
 - You then try to read the numbers or symbols on the test, starting with the largest and moving to the smaller ones
- **Your Prescription**
 - The smallest number or symbol you can read at is represent your visual acuity and the strength of the consumer's prescription
- **Building The Glasses**
 - Check the Snellen test prescription for visual acuity and lens type
 - Match lenses based on color coding or symbols
 - Choose lenses according to the prescription's color/symbol code for each eye
 - Place the left lens in the left wedge and right lens in the right wedge of the frame
 - Ensure lenses are securely placed in the frame
 - Verify the correct color/symbol matches for each eye and proper lens fit
- **Sizing Options**
 - The original measuring string from the Snellen test can be repurposed to create a customizable lanyard for the glasses
 - By cutting the string to an appropriate length and attaching it to the end temples of the glasses with small rubber pieces, it will prevent slippage and ensure a secure fit
 - A cord lock toggle allows for easy adjustment, ensuring the lanyard is comfortable and fits snugly around the head
 - This not only adds functionality but also reduces waste by reusing materials from the eye test process, further aligning with our sustainability goals.

Impact of Self-Testing

Many communities around the world lack the resources and funding to establish and sustain adequate vision testing facilities. The absence of affordable insurance and the high costs ~CAD\$200 for professional vision testing leave countless individuals without access to essential eye care. To address this pressing issue, we have developed an affordable and innovative solution: a self-administered remote vision test. This approach allows individuals to determine their prescription based on their results, eliminating the need for expensive equipment or professional intervention. By providing this accessible alternative, we aim to improve the lives of over one in eight people globally who currently face financial barriers to proper vision care.

Important Note: Home vision tests are not a substitute for a professional eye exam by an optometrist or ophthalmologist. They can give you a rough idea of your vision, but they cannot diagnose any underlying eye conditions. If you have any concerns about your vision, it's important to see an eye doctor for a comprehensive eye exam.

Price

- North America (\$20-\$30 / kit)
- International Market (\$10-\$15 / kit)

Low-Cost Eyewear Companies:

- Companies like Warby Parker offer glasses starting at ~\$95, focusing on stylish designs rather than sustainability or the underserved market
- Discount eyewear brands in international markets, such as Zenni Optical, sell simple glasses for ~\$20 but often lack sustainability credentials.

Key Takeaway: A price of **\$20-\$30** domestically and **\$10-\$15** internationally positions our product as affordable and accessible, aligning with its mission to serve underserved communities

Important Note: The packaging of the eye-wear kits will be used to advertise for companies and other partners resulting in the payment for shipping itself lowering the total costs by charging a fee to have advertising on the packaging.

Place

- Isolated areas
- Community centers in low income areas
- Underdeveloped countries
- Mobile Clinics
- Social Welfare Centers

Promotion and Advertising

Website:

- Create a professional, mobile-friendly website that explains:
 - Our mission and impact
 - Product features and benefits
 - Stories from communities
 - A "For every Three bought, we Donate One" or similar model (if applicable)
- Add a blog to share updates, stories, and educational content about vision health

Social Media:

- Platforms: Instagram, Facebook, Twitter, LinkedIn, and TikTok
- Content Ideas:
 - Before-and-after stories of improved vision
 - Videos of the eyewear assembly process
 - Posts about sustainability and the bamboo frames
 - Collaborations with influencers passionate about sustainability or social impact
- Use hashtags: #SustainableEyewear, #AffordableVision, #EcoFriendly, #VisionWithoutLimits, #Nopaque

Leverage Traditional Media:

1. Press Releases:

- Announce our launch, partnerships, or community success stories

2. Local Radio and TV:

- Advertise in areas with high accessibility to underserved audiences

3. Magazines and Newspapers:

- Target publications focusing on sustainability, healthcare, or community impact

Sales Forecasting

- Initial Weekly Sales Target:
50–100 units per week during the launch phase in Canada
 - This is a realistic target based on the following factors:
 - Early demand from NGOs, schools, or community organizations
 - Direct sales to eco-conscious consumers and individuals in underserved areas
 - Partnerships with social impact organizations distributing the kits
- Mid-Term Goal:
Increase to **200–300** units per week within the first 6–12 months as awareness and demand grow
- Long-Term International Goal:
Scale to **500–1,000** units per week as operations expand to underserved global markets

Market Research

The Global Need for Affordable Eyewear

- Over 1 billion people globally suffer from vision impairment that could be corrected with eyeglasses (WHO, 2021)
- The majority of these individuals live in low-income or underserved regions where affordability and access are barriers
- **Impact of Vision Impairment:**
 - Poor vision reduces productivity, limits educational opportunities, and affects overall quality of life

Affordability Challenges

- Conventional eyewear remains unaffordable for many due to high manufacturing, distribution, and retail costs
- Budget-conscious consumers and NGOs often seek low-cost, scalable solutions

Market Trends in Sustainability

- **Consumer Preferences:**
 - Increased demand for environmentally friendly and sustainable products, particularly in developed markets like Canada, where the product will initially launch
 - Younger generations (millennials and Gen Z) prioritize sustainability and social impact when making purchasing decisions
- **Environmental Impact:**
 - The eyewear industry produces millions of plastic frames annually, contributing to environmental degradation
 - Bamboo is a highly sustainable alternative, offering durability and eco-friendliness

Production

Production Plan

Assembly Line Setup

1. **Stations:**
 - **Bamboo Frame Production:** Cut, shape, and polish bamboo pieces using refining tools
 - **Lens Customization:** Shape lenses to fit frames using the laser machine
 - **Kit Packaging:** Assemble the frames, lenses, and educational materials into kits
2. **Workforce Allocation:**
 - Combine **volunteer labour** for simple tasks like packaging and stamping charts with **fairly paid employees** to handle machinery and quality control

3. **Quality Control:**

- Conduct inspections at each step, especially for lens shaping and frame fitting, to ensure durability and functionality

Equipment Needed

- **Bamboo Refinery Machine:** Processes raw bamboo into usable components for frames.
 - Estimated Cost: \$10,000–\$20,000 CAD
- **Lens Cutting/Shaping Laser Machine:** Precision cutting and shaping of optical lenses.
 - Estimated Cost: \$15,000–\$25,000 CAD
- **Paper Cutters, Stencils, Ink Cartridges:** For Snellen charts and diagrams.
 - Estimated Cost: \$500–\$2,000 CAD

Facility Setup

1. **Location:** Start with a small, centrally located facility in Canada, such as in Ontario or British Columbia, with access to transport for shipping
2. **Space Requirements:**
 - Production: 1,500–2,500 sq. ft. for machinery and assembly lines
 - Storage: 500–1,000 sq. ft. for raw materials and finished kits
3. **Utilities:** Ensure availability of electricity for machinery, proper ventilation for bamboo dust, and internet for coordination and tracking

Workforce Plan

1. **Volunteers:**
 - Recruit from local communities, NGOs, or student groups interested in sustainability and social impact
 - Train volunteers for tasks like packaging and simple assembly
2. **Fairly Paid Employees:**
 - Hire skilled labour for machine operation, assembly supervision, and quality control
 - Pay competitive wages aligned with Canadian labour laws

3. Training Programs:

- Offer workshops to train both volunteers and employees on equipment usage and assembly processes

Distribution and Logistics Risks

Shipping Delays

- **Risk:** Delays in shipping materials or finished kits, in remote areas
- **Mitigation:**
 - Work with reliable logistics partners experienced in last-mile delivery
 - Optimize inventory levels to ensure local availability of products

Regulatory Challenges

- **Risk:** Import/export restrictions, tariffs, or compliance requirements in new regions
- **Mitigation:**
 - Research local regulations thoroughly and obtain necessary certifications before expansion.
 - Partner with local distributors familiar with compliance

Materials Procurement

Materials	Costs
Bamboo	<u>\$0.07 - \$0.11 / piece</u>
Organic Plastic (Organic Lenses)	<u>\$0.30 - \$0.50 / lens</u>
String	<u>\$0.02 - \$0.05 /m</u>
Paper (6.5" X 3.5")	<u>\$0.01 - \$0.03 / sheet</u>
Snellen Chart ink and diagrams	<u>\$0.50 - \$1.00 each</u>
Recycled Cardboard Box (8" X 6")	<u>\$0.10 to \$0.25 / box</u>

Finances

Financial Plan

Revenue Potential

Initial Phase (Canada & USA)

- Weekly Target Sales: 50–100 kits.
- Selling Price per Kit: Estimated at **\$20–\$30** (affordable yet profitable).
- **Weekly Revenue:**
 $50 \times 20 = 1,000$ to $100 \times 30 = 3,000$
 Projected weekly revenue: **\$1,000 to \$3,000.**
- **Annual Revenue (Year 1):**
 $\text{Weekly Revenue} \times 52 = \text{\$52,000 to \$156,000}$

Expansion Phase (International)

- Units Sold per Week: Scaled to **500–1,000** units in underserved markets.
- Selling Price: Adjusted to **\$10–\$15** for affordability in low-income regions.
- **Weekly Revenue:**
 $500 \times 10 = 5,000$ to $1,000 \times 15 = 15,000$
 Projected weekly revenue: **\$5,000 to \$15,000.**
- **Annual Revenue (Year 2+):**
 $\text{Weekly Revenue} \times 52 = \text{\$260,000 to \$780,000}$

Startup Costs

Material Costs (First Batch of 1,000 Kits)

- Estimated unit production cost: \$1.18–\$3.03 (from earlier calculation).
- Total material cost: $1,000 \times 3.03 = 3,030$ (worst-case scenario)

Equipment Costs

- Bamboo Refining Machine: \$3,000–\$5,000.
- Laser Lens Cutting Machine: \$8,000–\$12,000.
- Other Equipment (e.g., ink printers, stencils, paper cutters): \$2,000–\$3,000.
- Total equipment cost: **13,000 to 20,000**

Operational and Fixed Costs

- Labor: Combination of volunteers and paid employees (~\$18/hour for 10 employees).
 Monthly labor cost for 1 employee: $18 \times 8 \times 20 = 2880$
- Labor costs for 1 month with 10 employees: $2880 \times 10 = \mathbf{28800}$
- Rent: Shared workspace or small warehouse (~\$500/month).
- Utilities and Supplies: **\$200–\$300/month.**

Total Startup Costs (First Month)

- Material Costs: \$3,030
- Equipment Costs: \$13,000–\$20,000
- Operational Costs: ~\$24,750

Grand Total:

~41,260 - 48,260 for the first month of production

Risks

High Initial Investment and Slow Revenue

- **Risk:** startup costs, including equipment, labor, materials, and promotional activities, could exceed the initial budget, especially if sales are slower than anticipated
- **Mitigation:** Start with a smaller scale of production and gradually increase capacity based on demand

Overestimation of Market Demand

- **Risk:** Market demand in underserved communities might not match expectations due to cultural differences, or accessibility
- **Mitigation:** Conduct more market research and projects in target regions to verify demand before scaling

Dependence on Volunteers and Fair Labor

- **Risk:** If volunteer labor is unavailable or paid labor requirements increase, labor costs could rise beyond sustainable levels
- **Mitigation:** Use incentives for volunteers (e.g., certificates or rewards)

Appendix A

-  Lens
-  2.5x Lenses
-  0.25x Lenses
-  Bamboo

