

iSight



...

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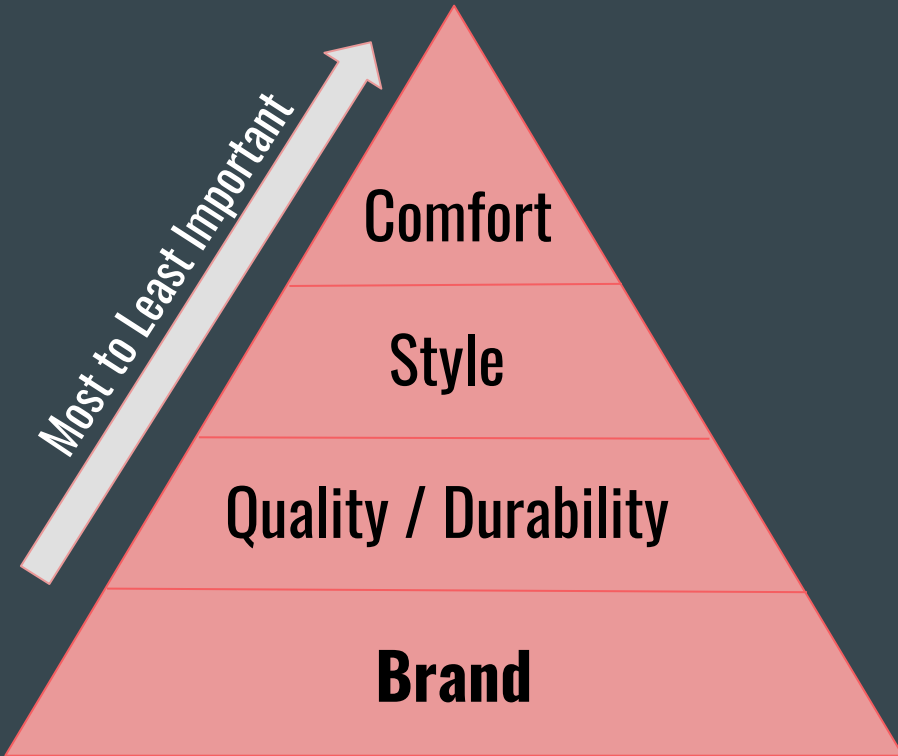
Tyler Klein

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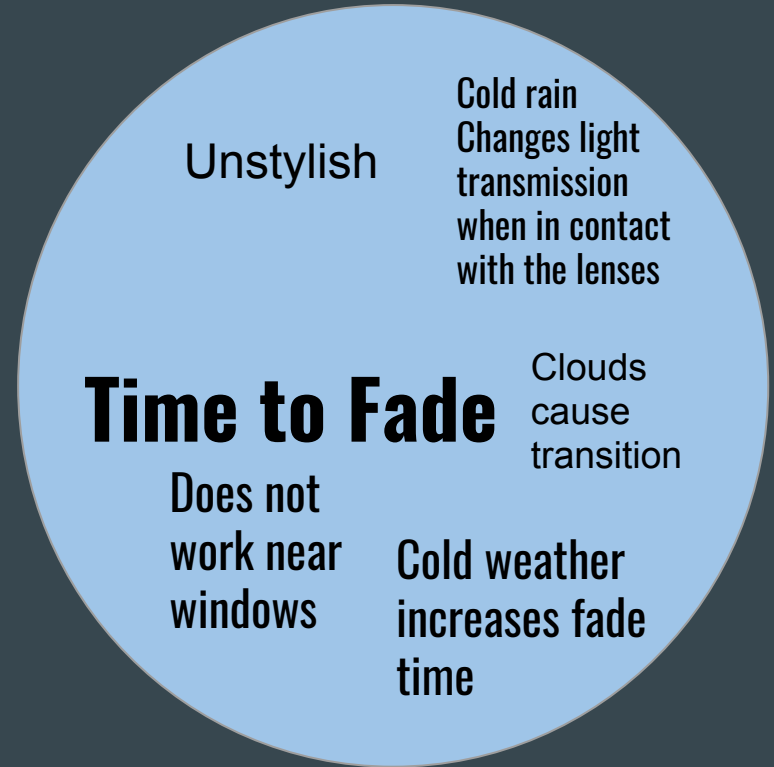
Sierra Perrine

Interviews

What is most important in Sunglasses?



What do you hate about transition lenses?



Product explanation

Regular Sunglasses:

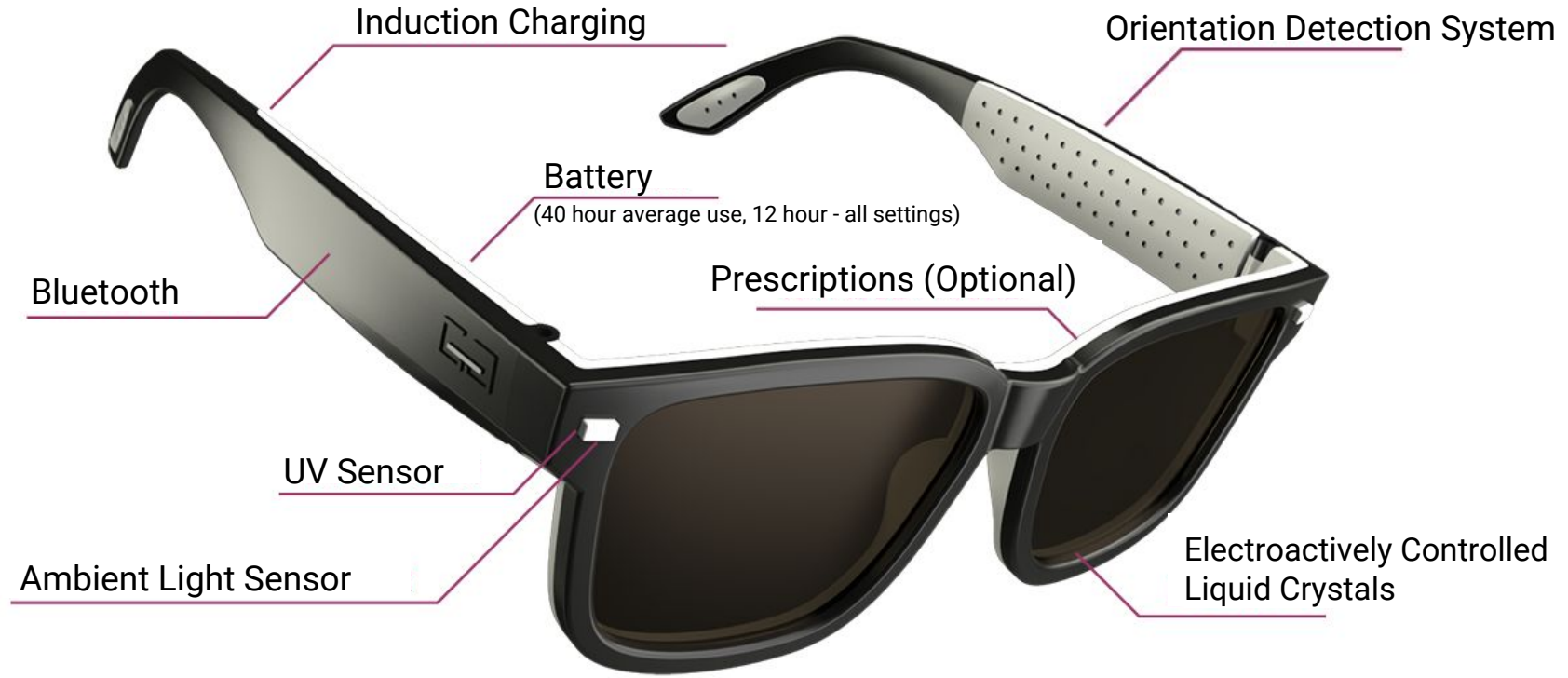
- Fashionable frames
- Electronic capability
- Advantages

Prescription Lenses:

- Customization option
- Transfer time
- Battery



iSight Frame Model



Charging, Battery Life, and Battery Customizations

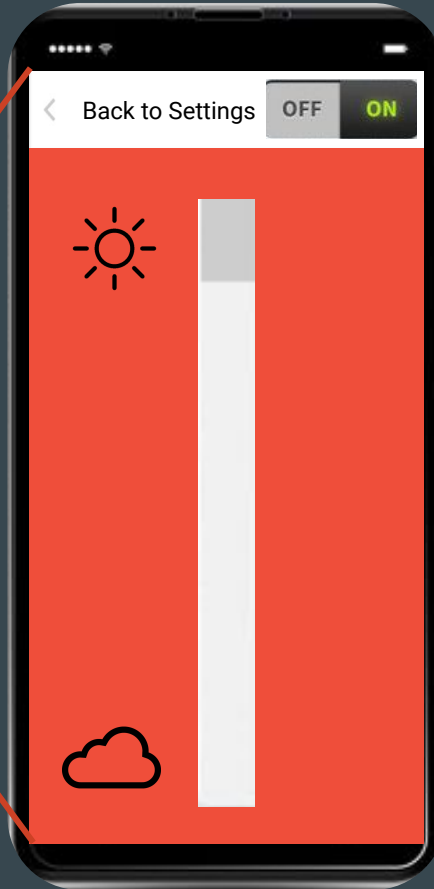
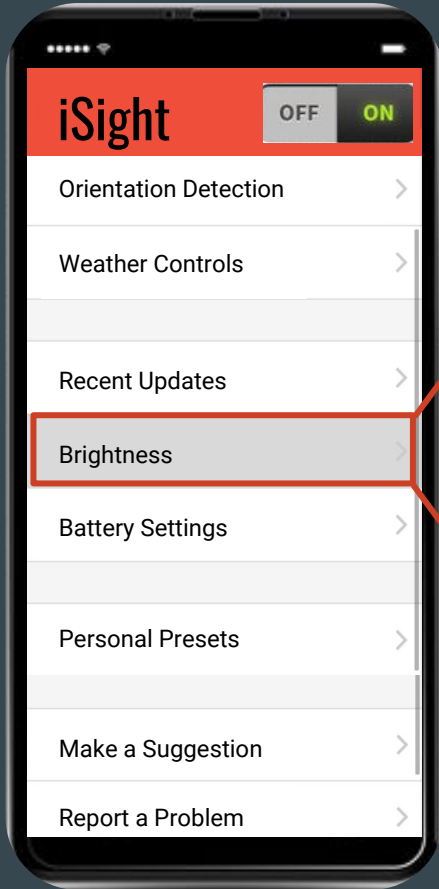
- Up to 1 week charge with consistent day to day use



- Glasses can be charged alongside phones, watches, and other electronic devices

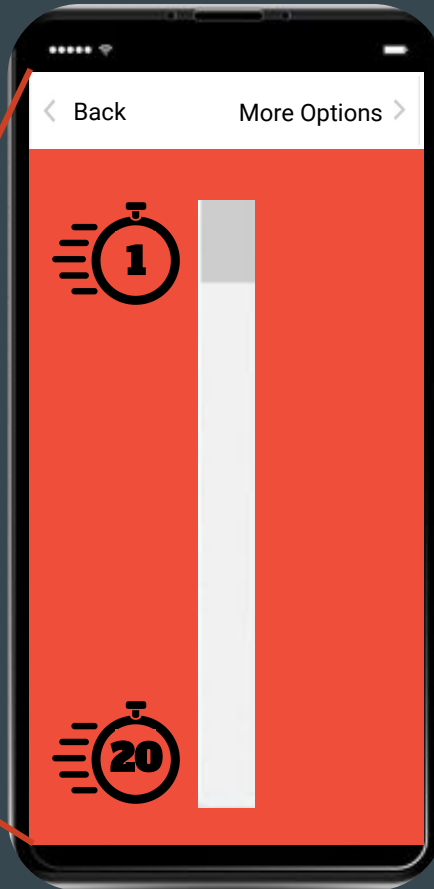
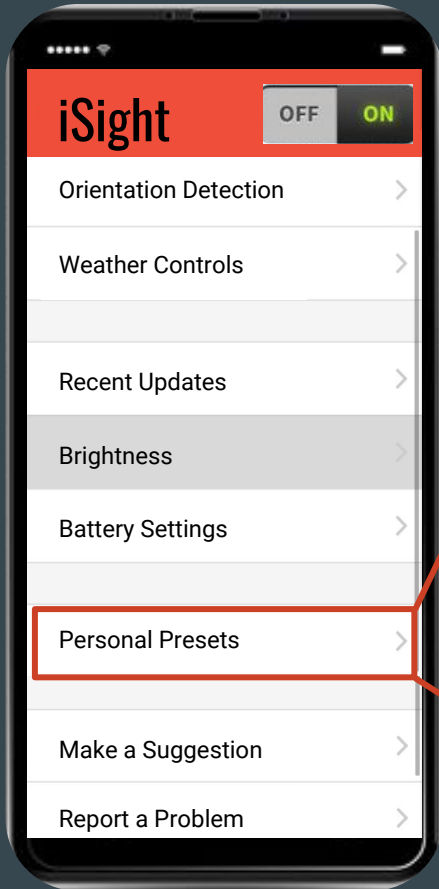
- ① UV Light Sensor
- ② Additional Battery
- ③ UV Light Sensor
- ④ Orientation Detection Sensor
- ⑤ Induction Charging Pad

Bluetooth: Connection to App



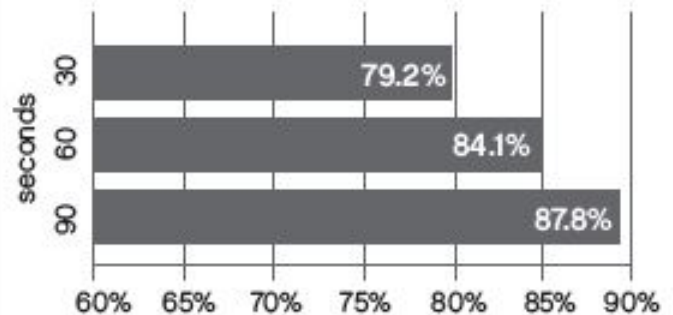
- Manually change transparency and orientation detection settings
- Instant performance feedback of glasses
- Monitor battery life
- Quick and easy access
- Control device always on hand

Bluetooth: Connection to App



- Glasses can fade and clear instantaneously or over time
 - (1-20 second difference)
 - Preferences emphasized
- Advertisement for newest transition lenses as a comparison:

Darkness Achieved Over Time



Customer Segments: Dual Markets

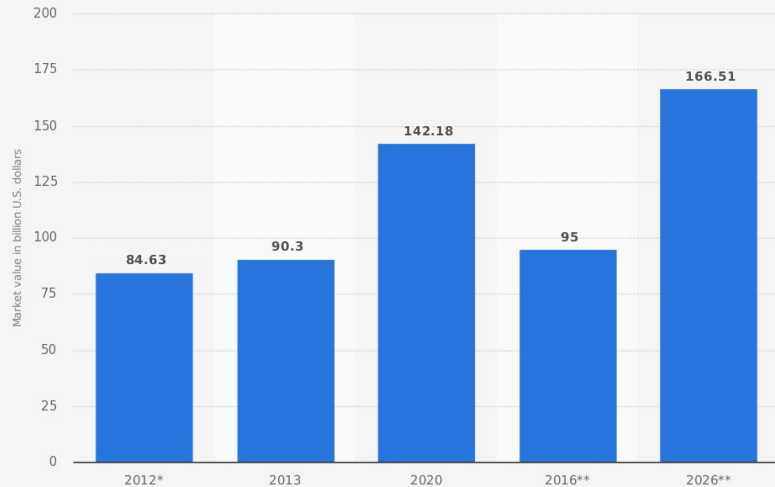
Prescription Lenses

- 64% of American adults have prescription lenses
- Over \$20 billion in sales in 2017
- 85,200,000 sold in 2016

Sunglasses

- 75% of Americans use sunglasses
- \$3.596 billion in revenue in 2016
- 95,900,000 sold in 2016
- 12% of sunglasses use prescription lenses

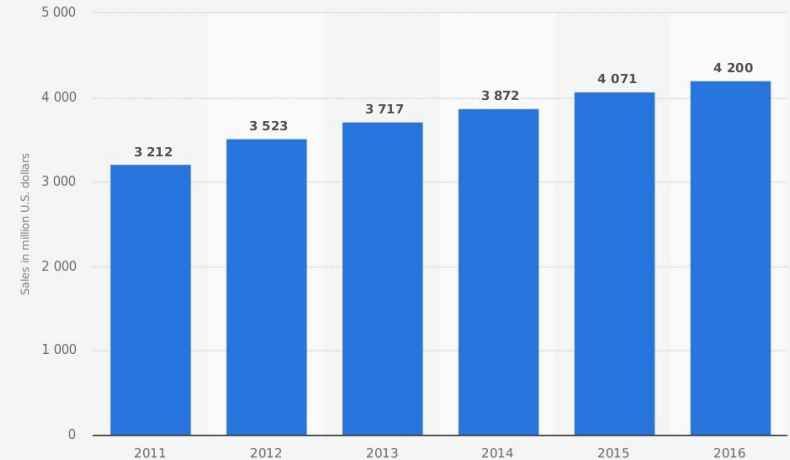
Value of the global eyewear market from 2012 to 2026 (in billion U.S. dollars)



Sources
PR Newswire; Persistence Market Research
© Statista 2018

Additional Information:
Worldwide; Statista; Grand View Research; Persistence Market
Research; 2012 to 2016

Retail sales of plano sunglasses in the U.S. optical market from 2011 to 2016 (in million U.S. dollars)



Source
The Vision Council
© Statista 2018

Additional Information:
United States; The Vision Council; 2011 to 2016

Market: Short Term Development

The screenshot shows a web browser displaying the iSight Sunglasses website. The browser's address bar shows the URL <https://electrolense.isight.com>. The main header features the brand name "iSight Sunglasses" in large black font, with a price tag showing a discount from ~~\$349.99~~ to \$299.99. Below the header, the page is divided into several sections:

- Electro-Lense**: A section with two red buttons labeled "NASA Tech" and "Benefits".
- Product Image**: A pair of black-framed sunglasses with blue-tinted lenses.
- Benefits of iSight Prescription Lenses Vs. Transition Lenses**: A section with a large left-pointing arrow and a row of five overlapping lens samples showing varying shades of gray.
- iSight Sunglasses**: A vertical column of five red buttons: "Customization", "Styles", "App Interface", "More About", and "Contact us".
- Your Cart**: A section with a red "Check out" button, the text "Orders 1 pair shipped now", and a red "Track Order" button.
- Your Categories**: A section with a red "View" button.

At the bottom of the page, there is a footer with links for "Advertising", "For Businesses", "About Google", "Policies and Guidelines", "Settings", and "Google.com".

- Centralized website
- Awareness from NASA Technology
- Personal styles and app customizations

Market: Long Term Development

- Partnerships with reputable prescription and glasses companies
 - Exclusive license agreement and independent production license
- Brand association and awareness broadens customer segment

The screenshot shows the Ray-Ban website interface. At the top, there is a navigation bar with the Ray-Ban logo, a shopping cart icon, and links for 'USA Shop: Free Overnight Shipping and Free Returns', 'Store Locator', and 'My Account'. Below the navigation bar, there are menu items for 'SUNGLASSES', 'EYEGLASSES', 'CUSTOMIZE', 'PRESCRIPTION', 'LENSES', 'STORIES', and 'VIRTUAL MODEL', along with icons for 'BAG', 'WISH LIST', and 'SEARCH'. The main content area features a large image of a pair of black sunglasses with blue-tinted lenses. To the right of the sunglasses, the text reads 'A NEW CLASSIC' in large, bold letters, followed by 'NASA Inspired USER Integrated STYLE Envisioned' and a large black arrow pointing right. Below this, the text 'iSIGHT electro-lense' is displayed in a bold, sans-serif font. Underneath, a smaller line of text says 'A contemporary, slender design inspired by the iconic iSIGHT: electro-lense wear company'. Below this text, there are two smaller images of sunglasses: a pair of black sunglasses on the left and a pair of gold-rimmed sunglasses on the right. Below these images are the labels 'SUNGLASSES >' and 'EYEGLASSES >'. At the bottom of the page, there is a section titled 'CREATE YOUR OWN RAY-BAN' with a sub-headline 'Create one-of-a-kind sunglasses for everyone, choose color and lenses, add your personal message.' and a red button that says 'CUSTOMIZE NOW >'. To the left of this section, there are icons for '95 LENSES' and '19 STYLES'.



Current Product Status

- IP Status: Patent issued and received
- Head orientation detection system only test in piloting systems
- “Technology Readiness Level”

TRL 7

- Systems prototype demonstration in a space environment

TRL 9

•Actual system “flight proven” through successful mission operations

TRL 8

•Actual system completed and “flight qualified” through test and demonstration (ground or space)

TRL 7

•System prototype demonstration in a space environment

TRL 6

•System/subsystem model or prototype demonstration in a relevant environment (ground or space)

TRL 5

•Component and/or breadboard validation in relevant environment

TRL 4

•Component and/or breadboard validation in laboratory environment

TRL 3

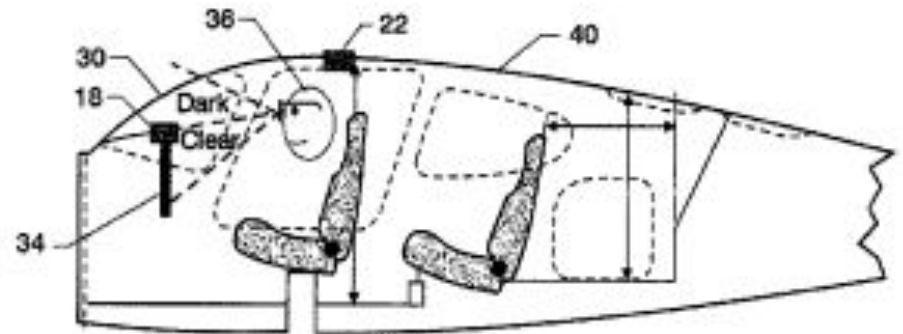
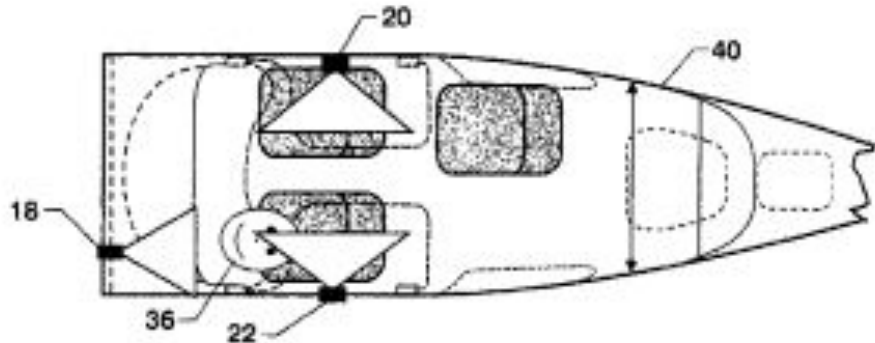
•Analytical and experimental critical function and/or characteristic proof-of-concept

TRL 2

•Technology concept and/or application formulated

TRL 1

•Basic principles observed and reported



Financials

Cost Structure

- Implementation of NASA technology
- Production of frames and glasses
- App development
- Shipping to retail stores
- Exclusive license with NASA

Revenue Streams

- Royalties with pre existing sunglass companies
- Established costs for online sales between \$300-\$350

Plan For Next Steps

1. Implement lens technology into smaller consumer frames

Acquire funds from NASA Langley Center for physical consumer prototype

2. Combine our technology with pre existing features (induction charging, prescriptions, UV and ambient light sensors, etc.)

Significantly less funding required for digital development

3. Develop Application that connects to frames via Bluetooth technology

See the Future Clearly



"There's a great,
big, beautiful
tomorrow shining
at the end of
every day."

-Robert Sherman

The Business Model Canvas: iSight

Michael Glaser, Hardy Graham, Tyler Klein, Robert Morgan, Sierra Perrine

<p>Key Partners</p> <ul style="list-style-type: none"> Famous sunglasses companies (i.e. Raybans) <ul style="list-style-type: none"> Our company maintains an exclusive license agreement and independent production license NASA Langley Center Prescription glasses stores Online retail (initially) 	<p>Key Activities</p> <ul style="list-style-type: none"> Production of electro-lenses with frames and batteries assembled together Online retail and distribution to major company stores Consistent app updates 	<p>Value Propositions</p> <p>Two main products:</p> <ol style="list-style-type: none"> Custom prescription glasses frames Standard electro-lense sunglasses (\$350) <ul style="list-style-type: none"> Less distracted driving Reduced need for multiple pairs of glasses Replacement for transition lenses (light transmission toggles instantly) Personal customization for light transmission Same style with major companies 	<p>Customer Relationships</p> <ul style="list-style-type: none"> Get: Partnership with NASA to show company reputation and quality of technology Keep: Product and app updates Grow: Transition to partnerships with main glasses companies 	<p>Customer Segments</p> <ul style="list-style-type: none"> Daily drivers who experience eye strain from sun (Photophobia) People who dislike the current transition lens model <ul style="list-style-type: none"> Also applies to anyone with regular prescription lenses Current sunglasses users: new model pair that changes light transmission of the lens depending on sunlight position, head orientation, and user specified preferences <ul style="list-style-type: none"> Mainly 18-35 year old "stylized" females
<p>Cost Structure</p> <ul style="list-style-type: none"> Implementation of NASA technology Production of frames and glasses App development Shipping to retail stores 		<p>Revenue Streams</p> <ul style="list-style-type: none"> Royalties after partnership with pre existing sunglasses companies and prescription stores Established costs for online sales (\$300-\$350) 		

Sources

- <https://www.zennioptical.com/sunglasses>
- <https://www.tampinesoptical.com/shop/others/nikon-see-coat-plus-uv/>
- <https://technology.nasa.gov/patent/LAR-TOPS-101>
- <https://www.ray-ban.com/usa>
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- <https://www.lenscrafters.com>